

Appendix 22-A

*Simpcw First Nation Traditional Land Use and Ecological
Knowledge Study*

HARPER CREEK PROJECT

**Application for an Environmental Assessment Certificate /
Environmental Impact Statement**

SIMPCW FIRST NATION

FINAL REPORT

PUBLIC VERSION

**TRADITIONAL LAND USE
&
ECOLOGICAL KNOWLEDGE
STUDY**

REGARDING THE PROPOSED

**YELLOWHEAD MINING INC.
HARPER CREEK MINE**

Prepared by

SFN

Sustainable resources Department

August 30, 2012

ACKNOWLEDGEMENTS

The Research Team would like to thank the Simpcw First Nation (SFN), its elders, members, and leadership for the trust you've placed in us. We recognize all community members who contributed their knowledge of their history, culture and territory to this work.

The report has been the product of a collaborative effort by members of the research team and as such is presented in more than one voice. The Simpcw First Nation Traditional Land Use and Ecological Knowledge Study presents evidence of Simpcw First Nation (SFN) current and past uses of an area subject to the development of the Harper Creek Mine by Yellowhead Mining, Inc. The report asserts that the Simpcw hold aboriginal title and rights in their traditional territory, including the land on which the Harper Creek Mine is proposed. This is supported by the identification of one hundred and four (104) traditional use locations in the regional study area (Simpwul'ecw; Simpcw territory) and twenty (20) sites in the local study area.

The traditional use sites identified, described, and mapped during this study confirm Simpcw connections to the area where the Harper Creek Mine is proposed. These sites include food harvesting locations like hunting places, fishing spots, and plant gathering locations. The sites include spiritually significant places, named places, and material harvesting locations. Likewise, the landscape is marked with habitation spots like camps and cabins. This territory is well-known to Simpcwemc (Simpw people).

The report is intended to contribute to the assessment of the Harper Creek Mine project by identifying the impacts and effects of the mine on Simpcwemc and culture. It is hoped that it will reduce conflict over the mine project and will lead to dialogue between the SFN and Yellowhead Mining Inc. By detailing the culture and history of the Simpcwemc, the report promotes a greater appreciation of the importance, value, and meaning of SFN uses of the development area and the traditional ecological knowledge that is associated with the area.

This report is the product of three major types of social science research. First, it depends on archival research and an evaluation of archival and published documentary source material. The study has reviewed readily available historical documents related to the Secwepemc in an effort to understand how observers like government officials, explorers, anthropologists, and historians saw the connections between the Simpcwemc and their territory. Second, interviews with Simpcwemc identified the locations of past and current uses of Simpcwul'ecw. Third, a ground-truthing trip to the Harper Creek Mine location confirmed the locations of traditional use sites identified during the interviews and archival research.

The Simpcw people are the exclusive residents of Simpcwul'ecw. Traditional Simpcw culture was based on gathering plants, animals, and fish – and in many ways Simpcw culture continues to be based on those activities. The report presents evidence of these practices. By extension, the report illustrates connections to their territory by way of maps and corresponding charts showing how Simpcwemc used dozens of plant, animal, and fish species. As largely a socially egalitarian group that followed the leadership of respected elders and decisions makers, a seasonal round of movements, resource procurement tasks, and habitation sites tied Simpcwemc to this specific territory. It is acknowledged, however, that the Simpcwemc are

part of larger Secwepemc and Interior Salish cultures. Relationships with neighbouring groups are managed through marriage and, at times, force.

The development of the Harper Creek Mine will impact the local environment, Simpcw social and cultural practices, and Simpcw aboriginal title and rights, including their right to hunt, fish and gather plant foods. It poses a threat to small herds of caribou that travel through the area. The Simpcw assert that development activities associated with the mine will impact the SFN from accessing their traditional lands for the purpose of practicing their traditional livelihood. The loss of SFN's ability to practice their traditional livelihood will compromise their health and well-being, cultural practices, and trade networks. Furthermore, disruption to the SFN traditional livelihood will ultimately prevent the cultural transmission of traditional knowledge to future generations of Simpcwemc.

Should this mine proceed, this report offers several recommendations. These recommendations include:

- Confirm that the vegetation and wildlife studies are complete and comprehensive.
- Determine whether a mitigation plan is possible, and if so develop a mitigation plan to avoid harming plants and animals important to SFN.
- Determine whether a mitigation plan is possible, and if so develop a fisheries strategy program to address the impact on fish bearing rivers or creeks that flow into or near the project footprint, particularly Harper Creek.
- Engage with the SFN to learn about SFN culture, history and harvesting practices and how to avoid disturbing the SFN seasonal round of activities. A handbook prepared for Yellowhead employees is recommended.
- Treat with respect cairns (two sites) and cultural markers identified through this project. Ceremonial protocols must be followed.
- Create "no development" buffers around transportation corridors used for hunting, gathering and trapping.
- Determine whether a mitigation plan is possible, and if so Yellowhead Mining Inc. and SFN should develop cooperatively a caribou mitigation plan to ensure that the herd is not impacted by development activities and/or predators accessing the area as a result of new access opportunities.
- Develop cooperatively a territorial ecological threshold program.
- Control access to the local study area.
- Understand the significance of any site that holds a place name and appreciate how development activities may or may not impact or remove these place names from both the landscape and the SFN knowledge base.
- Create a liaison position within the SFN community.
- Update the SFN people through the liaison regarding all plans prior to, during and after construction.
- Update SFN people regarding plans to limit construction damage to local forests and to mitigate development damage.

- Create, at minimum, regular points along the proposed access roads where people and animals can cross the route.

The study concludes that the Harper Creek Mine will impact the ability of Simpcwemc to conduct food gathering activities as well as other cultural and spiritual practices in both the local and regional study areas. Dialogue between Yellowhead Mining Inc. and the Simpcw First Nation is imperative and may result in mitigation of these impacts.

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Figure 1: SFN Traditional Territory

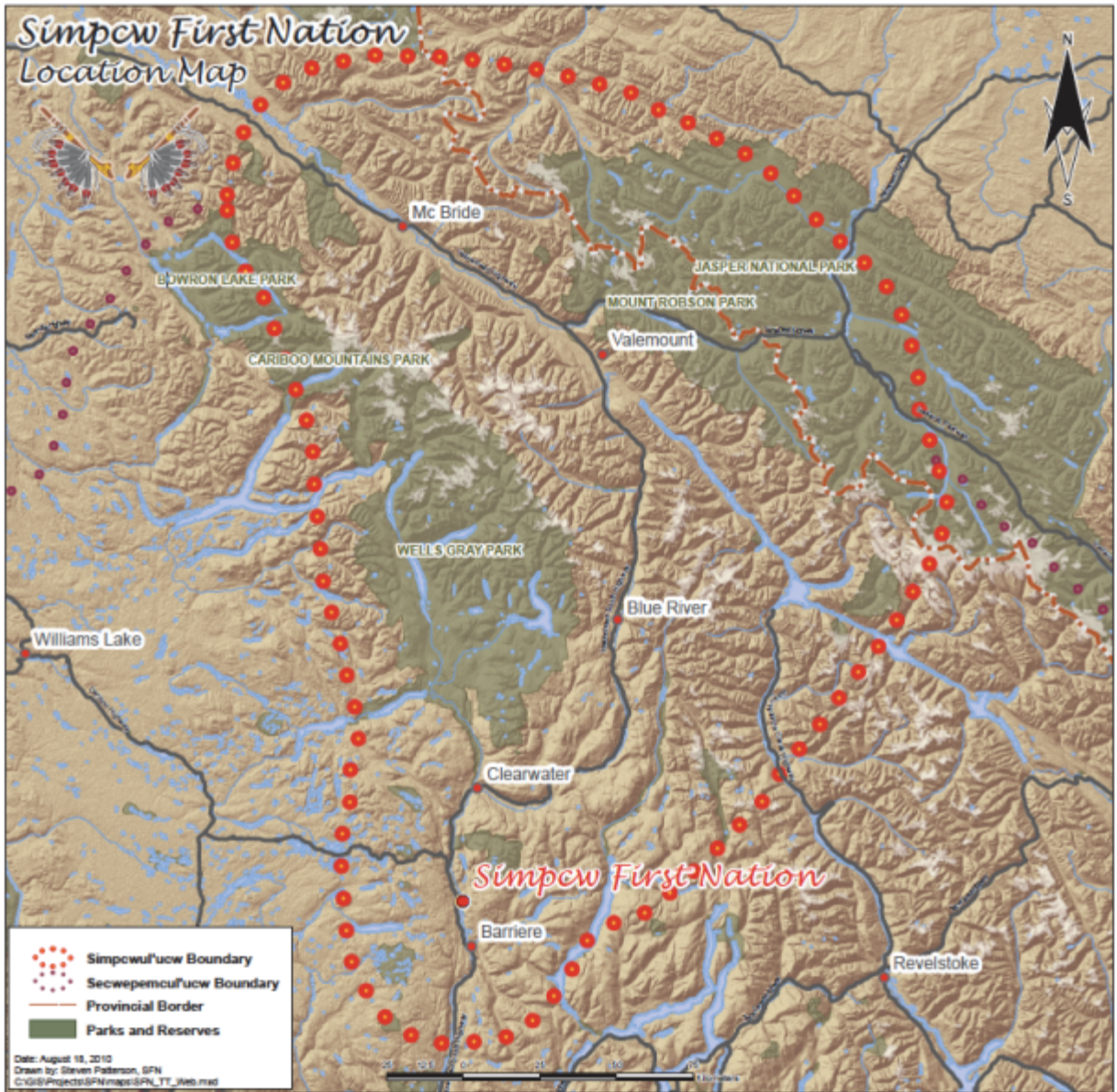
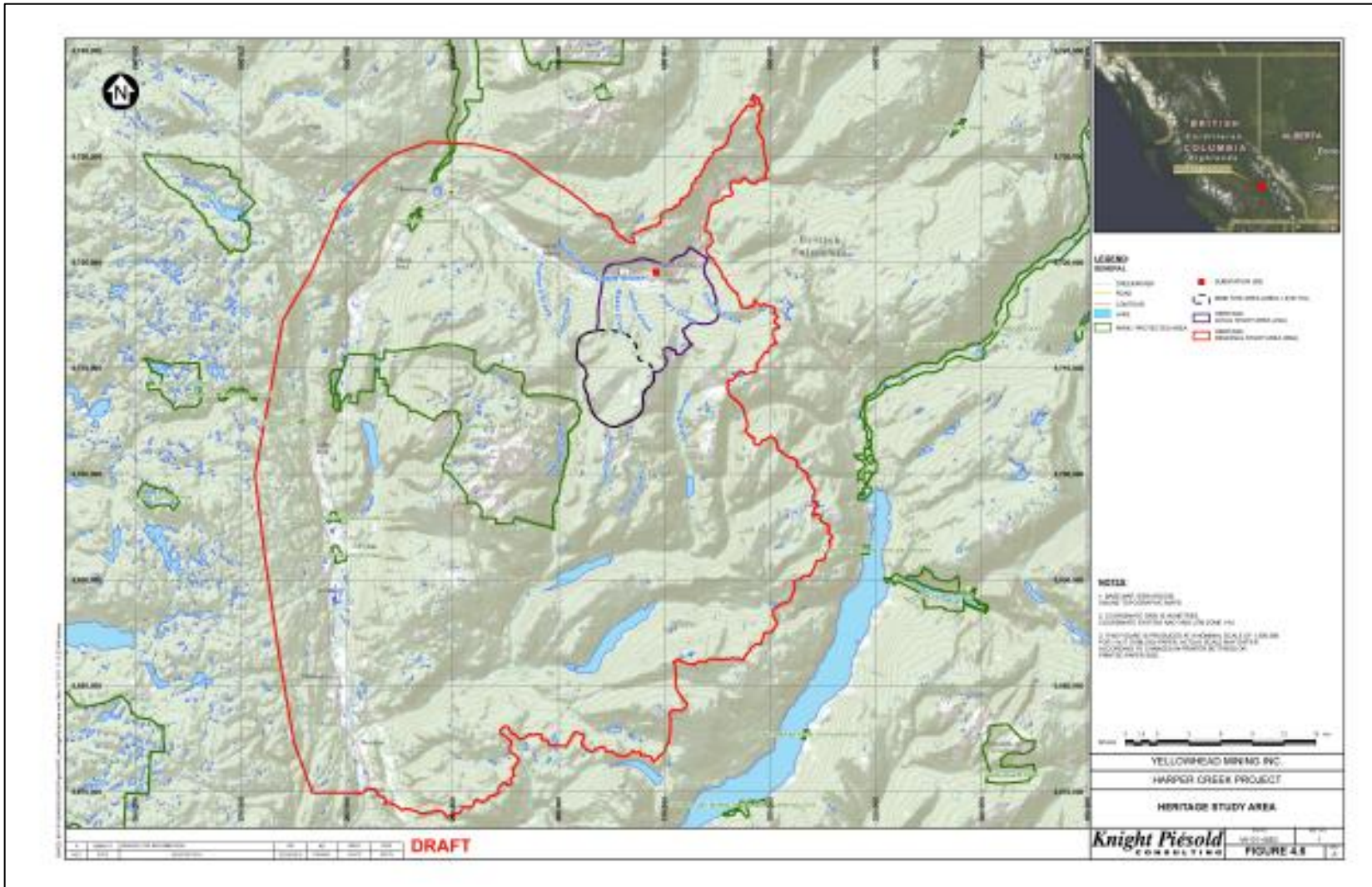


Figure 2: Study Area



1.1 Statement of Purpose for this Traditional Land Use & Ecological Knowledge Study

This project is designed to facilitate consultation and decision-making between Simpcw First Nation (SFN), and the Harper Creek Mine Project proponent, Yellowhead Mining Inc. The objectives of this study are to:

1. Collect information that will lead to a better understanding of both real and potential impacts and environmental effects on traditional culture, contemporary and future Simpcwemc lifestyles, practices and territory as may occur throughout the development and operation of the Harper Creek Mine Project (the “Project”);
2. Provide information about Simpcw First Nation concerns regarding both the real and the potential effects the Project may have on Simpcwemc social and community life, ecological resources, traditional lifestyles and cultural well-being;
3. Provide information that can assist in Project design and reduce conflict between Simpcw First Nations concerns and proposed Project development plans;
4. Initiate long-term relationship-building between Simpcw First Nation and Yellowhead Mining Inc.;
5. Cultivate an appreciation of Traditional Land Use and Ecological Knowledge as well as create clarity around Aboriginal perspectives among non-Aboriginal communities and audiences;
6. Contribute to the building of Traditional Knowledge capacity within Simpcw First Nation.

This study is founded on the understanding that Simpcw Traditional Knowledge is central to assessing the real and potential environmental and cultural impacts of the proposed Harper Creek Mine Project.

The data researched and presented in this study was completed for assessing this project. Use of this report for any other purposes requires SFN consent.

1.2 Terminology

Simpcw [*seempkw*] = Simpcw First Nation, the political body representing the Simpcwemc membership

Simpcwul'ecw [*seempk-ol-okw*] = Simpcw First Nation Traditional Territory; see Fig 1.
Simpcwul'ecw

Simpcwemc = the people of Simpcwul'ecw

Simpcw⁷etkwe =

Secwepemc = the larger Interior Salish nation to which we Simpcwemc belong

Secwepmcul'ecw = the Traditional Territory of the Secwepemc Nation, within which Simpcwul'ecw is situated, and which occupies the north-eastern sector. see Fig 1:

Simpcwul'ecw

Secwepemctsin = the Salishan language shared, with regional variations, among all Secwepemc peoples, of which Simpcwemc are one.

Spa⁷xst = the Mountain and Creek of the same name where the Harper Creek Mine Site is located; Harper Mountain = *Spa⁷xst*, Harper Creek = *Spa⁷xst Creek*

Local Study Area/Regional Study Area= LSAs are defined as the project footprint and the surrounding area within which there is a reasonable potential for direct impacts to occur due to the Project components or activities. RSAs incorporate a broader geographical area where there is a potential for indirect impacts or baseline information that may be relevant to the LSA and the effects assessment.

Perscomm = data acquired through personal communication, as specified in Footnotes.

1.3 The Harper Creek Mine Traditional Land Use and Ecological Knowledge Study

When this study began, the Harper Creek Project proposed an open pit copper-gold-silver mine located in south-central British Columbia approximately 150 km northeast by road from Kamloops. The Project is located about 10 km south of the unincorporated municipality of Vavenby, which is the closest population centre. The Company now holds mineral tenures totaling 42,636 ha.

Noranda Exploration and US Steel discovered the deposit in 1966. The two companies conducted exploration separately until 1971, when they formed an exploration joint venture which ceased in 1981. Drilling on the main deposit totaled 25,806 metres in 161 holes. In 1996, American Comstock drilled 2,847 metres in 8 holes. Yellowhead has acquired and digitized the data from the prior programs and recovered partial or complete drill core from 128 historical holes on site.

Yellowhead Mining was formed in 2005 as a private British Columbia company. In 2005 and 2006, five claim groups were acquired or optioned by Yellowhead Mining on the historical drilling area and contiguous parts of the Eagle Bay Assemblage, the mineralogical group which includes the Harper Creek deposit.

The Harper Creek Project is an extensive volcanogenic sulphide system, with a mineralized

envelope greater than 2.5 km along strike, over 2.0 km down dip, in a 1 km thickness of volcano-sedimentary stratigraphy.

Copper mineralization is tabular, striking east-west and dipping about 15° to 25° to the north with a number of high copper grade cores that persist with depth within a multi-phased stringer zone. The deposit is open along strike to the east, down dip and at depth.

Harper Creek is hosted in the Eagle Bay Assemblage, comprised of the Lower Paleozoic Greenstone Belt. There are intensely altered sequences of black shales, mudstones, mafic and felsic flows and tuffs.

A broad lower-grade zone of copper and gold/silver is linked to multi-phased stringer or feeder zones. Higher grade copper-bearing massive sulphides are adjacent to porphyritic rhyolite flows. Vertical zonation ranges from upper lead/zinc/silver/barite/pyrite to deeper copper(some zinc)/silver/gold/pyrrhotite.

During late 2005 and early 2006, the company re-logged and re-analysed historical drill core recovered from the site, and produced a NI43-101 data compilation report. Beginning spring 2006, Yellowhead completed a 1,000 line kilometre airborne geophysical survey over approximately 90 square kilometres, identifying several high priority targets for further exploration. Also in 2006, a 12-hole, 4,077 metre in-fill drilling program intersected several high grade zones and confirmed the volcanogenic massive sulphide characteristics of the deposit. At least ten horizons have been identified, with both open-pit and underground potential.

In 2007, Yellowhead completed a 15,904 metre, 40-hole drill program. The first six step-out holes down-dip all encountered multiple mineralized horizons including massive sulphide zones.

In 2008 through April, the company drilled another 7,655 metres in 23 holes, for a total of 26,854 metres in 75 holes by the Company. The Company continued drilling with 8,870 metres in 12 holes (76 through 87) in late 2010 through May 2011 in a continuing program, for a total of 35,724 metres by Yellowhead and 65,425 metres including historical drilling.

In support of the Feasibility Study, the Company has completed a total of 17,800 metres of drilling to December 31, 2011, including:

- Resource confirmation: 37 holes for a total of 10,843m
- Condemnation: 8 holes for a total of 1,791m
- Resource expansion: 11 holes for a total of 4,725m
- Metallurgical sampling: 4 holes for a total of 441m.

2.1 Overview

A team of researchers from the Simpcw First Nation conducted the research for this report with project direction provided by DM Cultural Services, Ltd. (DMCS). DMCS researchers assisted the SFN team in setting up the research project and finalizing its design. The SFN researchers conducted all of the archival research, oral interviews and ground truthing.

The research was divided into four phases. The phases were: Phase 1, the planning and establishment of the project; Phase 2, documentary research and preliminary mapping; Phase 3, interviews with elders and ground truthing; and, Phase 4 final map and report production.

2.2 Phase 1: Project Setup (January 2012)

Phase 1 focused on setting up the project. At this stage, the SFN research team was hired and office infrastructure was put in place. The team was briefed about the project phases and purposes. Culturally related documents and or audio/video sources were identified for research, particularly those already in the SFN community. A basic storage and retrieval system was already in place, thus allowing this study to add to the existing system. This phase of the project also included a meeting between the project Director and the SFN Chief and Council to ensure that project objectives and deliverables were understood by all.

2.3 Phase 2: Archival Component (February 2012 to March 31 2012)

Phase two consisted of preliminary research and the identification of all bibliographic sources pertinent to the SFN people and their territory. All sources were reviewed for TLU sites. A set of preliminary maps that identified TLU sites found in the archival document search was created. Utilizing TLU site recording forms, all written sources were reviewed for pertinent data. Special attention was paid to site activity, location and source of information.

As archival research continued to reveal TLU sites, this information was transferred onto the preliminary maps. Preliminary mapping consisted of placing dots, polygons or lines (representing TLU sites) on maps generated by SFN. Using the TLU site forms generated from the document search, a dot or polygon was placed on a map to signify an individual TLU site (each site may have contained numerous activities). Each site was then assigned a unique number that corresponded with a TLU file folder which was given the exact same number. Each TLU file folder held all TLU data that was accumulated about that particular site, including source of the information. On March 31 2012 a preliminary draft report was produced for Simpcw First Nation.

2.4 Phase 3: Oral Interviews and Community Meeting (April 1, 2012- June 30, 2012)

Phase 3 of the TLU project involved interviewing cultural advisors, listening to existing interview tapes to identify TLU sites, continued archival acquisition, mapping, data entry, draft mapping and report writing. The SFN held a number of existing interview tapes from past community projects. All of these existing interview tapes were reviewed for information and then the tapes or transcripts were placed in the community archive. Again, existing tapes were properly referenced on the site recording forms by identifying the project name, speaker, site and tape counter number. These sites were then mapped on the preliminary maps or the information was added to an existing TLU site file.

The majority of Phase 3 information came from cultural advisors; the identification of these individuals was a group effort. First, the SFN team developed a list of elders. One of the goals in interviewing Elders was to learn about TLU sites and practices of the SFN people. Furthermore, talking with Elders allowed us to understand where information came from and how it was passed on to others. Other individuals who were interviewed were those people whom may not have been considered Elders or SFN but who held a great deal of knowledge about the study area and SFN peoples.

A member of the SFN team first contacted all of the Elders or cultural advisors interviewed. This conversation typically consisted of a project description and purpose, followed by an interview request. In attempts to create a familiar environment during the interview, each interview occurred either in their house, or the Band Office. Interviews began with an introduction and explanation of the project and its goals. Discussions also included how the data would be used in the TLU study, who had permission to view the data and how the data may be used in the future. Only after the interviewee was comfortable with the people present in the room and the project goals, would the interview start. Each interviewee was walked through the project goals again and given various options such as having the interview recorded, signing a consent form or requesting a copy of the audio/video tape. All of the interviews were in English and audio/video recorded, lasting from two to six hours. Only in a few instances, the information was not marked on maps. At the completion of the interview, the cultural advisor was presented with an honoraria cheque.

The interviews were conducted using a set of 1:50,000 scale maps for reference and the plotting of site locations. More often than not, mapping occurred during the interview process. A separate set of interview maps was used for each interview. The data retrieved during the interview process was then remapped onto the preliminary maps.

The interviews were both rigidly structured and open ended. These interviews involved a formal set of questions aimed at retrieving TLU site specific information. However, throughout the interviews, the methodology often became open ended, as this encouraged the interviewees to take advantage of the looseness of the situation to talk freely, often mentioning

TLU sites that may not have otherwise been discussed. After an interview was completed, the data was remapped onto the preliminary maps and cross referenced with existing data.

Importantly, on May 18, 2012 a community meeting was held to discuss the project purpose and goals. This meeting was received very well by the membership in attendance and resulted in the documentation of additional cultural information concerning the study area. In addition, the community meeting led to five additional informants coming forward to share their knowledge about the study area through oral interviews. Of equal importance was the presence of members from two pioneering families whose property is within proximity of the proposed mine. Here too, the non Simpcw pioneer families volunteered their knowledge of Simpcw people frequenting the study area. On May 31, 2012 a draft report was produced for Simpcw First Nation.

2.5 Phase 4 Ground Truthing, Final Mapping and Report Writing (June-August 30, 2012)

Once the preliminary maps were completed, sites were identified by the team for ground truthing. These sites included high TUS site density areas within the regional and local project footprints. Ground truthing occurred over a one-week period. During this time the ground truthing teams applied learned skills to properly record data about each site in the ground truthing zone.

Due to weather conditions, ground truthing was postponed numerous times. Ground Truthing finally occurred during the week of July 16, 2012. Two main zones were identified during the ground truthing, the first being a general survey of the area between Chu Chua and Vavenby, and the second was of the mine footprint. The sites visited on all trips were photographed, GPS taken, measured where possible, and a surface examination was conducted. Once this was done, the site location was confirmed on the preliminary maps, remapped in the correct location or, in some cases because of physical evidence, new sites plotted.

When the ground truthing was completed, much time was spent processing the new information into the larger study. This included, creating new site forms for new sites discovered and using the ground truthing data to more accurately map the previously known information. All photographs were labelled with a unique photograph number and a site number.

Project members from SFN who attended the Ground Truthing expedition included Project Manager Robert Diaz, Research Coordinator Judy Banks, Research Assistant Dodie Eustache, GIS & Simpcw Lands Manager Steven Patterson, and his Assistant Donna Anderson. Of the Simpcw Elders interviewed for the project, several were able to attend the Ground Truthing expedition, totalling 5, one of whom is possibly the oldest living Simpcw band member, and all who hold a clear and articulate personal memory of land use in the study area, and extensive cumulative knowledge from previous generations.

Specifically, the expedition examined sites along the Chu Chua Road (Dunn Lake Road), from the Band office north to the south end of McTaggart Lakes, both the south (where Sasquatch lived for a while) and north (where Water Woman was killed) ends of Dunn Lake, Beaver (Hallamore) Lake (where one of the trails to Fog Horn begins), Birch Island, which included an SFN members cabin at Moilliet's, Vavenby proper (where many people lived before and after the Reserve times), Raft River Mouth (where the family fishing and gathering was situated), Clearwater Park (where people camped), Little Fort and Yehalliston Reserve on the east side of Little Fort. A brief tour of the Clearwater townsite evoked memories of berry picking and camping, as well as many gatherings all along the river between there and Vavenby. Elders rested and had lunch at Clearwater Park, where the water in Simpcwetkwe is clear on the north half and muddy on the south.

Figure 3: Frog Lake



The second zone consisted of a tour of the YMI properties to examine trails, plant and wildlife, any camping or hunting sites, and to visit a possible cairn site not yet declared pre- or post-contact. In addition, a second cairn site more recently located within a couple of kilometers of this

first one was to have been examined, but time restraints postponed the viewing of it.

As noted above, in addition to the 5 Elders present from zone one excursion, Simpcw Kukpi (Chief), and several Council members attended, as did some youth members.

After an extensive ascent up Vavenby/Harp Mountain, over rough roads to the YMI First Aid site, below the cairn site, attendees again assembled for a head count and further instructions regarding travel at these elevations, natural and existing development hazards, and communications with the First Aid site. Photographs of the immediate area and surrounding visible peaks were taken – Fog Horn and Granite Mountains and Dunn Peaks being closest in proximity. At this setting, Harp Mountain (often referred to by Elders as “Harper” Mountain), and Harper Creek were described at that point by Elders as good sources of game and fish, and that the caribou would be hunted here by their old people (AW). Upon conclusion of that gathering, the expedition continued farther up Harp Mountain to the mine site proper, where

all disembarked had lunch, and afterward the oldest Elders were seated in the ATV for the trek to the cairn site about 600m into the bush; the balance of the group traveled on foot.

Figure 4: Cairn/Cultural Marker



Along the way, a hunting supply cache, or complex hunting blind was located and photographs taken; the materials used to construct the structure were of post-contact vintage, but may have been situated on top of a known and well-used cache or hunting blind site, as there appeared to be a fairly visible caribou trail in close

proximity to it. Some evidence of corrals for holding horses was evident near this site, as was a possible pack box (partial), cache racks or crude shelves and possible meat hanging staves.

Figure 5: Ceremonial Protocol at Cairn



Along this route, the caribou lichens were abundant, and Elders remarked on the caribou trails, camps and hunting grounds that were known here. At the cairn site all dismounted and after some cursory examination and limited photographs, a ceremony was held as it was clear among the SFN members present that the cairn was of extreme cultural and historical significance either as a marker site but most likely part of a burial. The outer walls of cairn appeared to be constructed of

loosely stacked flat stones, in an oblong shape, and approximately 16" in height in some places and less in others, where the feature may have been disturbed. The feature appeared to be

about 6 feet in length and possibly 2.5' in width, but was partially overgrown with local vegetation. The loose construction style of the stones was reminiscent of Winyandi graves, but whereas these are usually completed with stone overlay and often surrounded by a small fence, this feature appeared to have been covered with short, sawn logs, rather more like a cache. This does not preclude it from having at one time been a burial and later used as a convenient overnight cache for dry goods, but it does further complicate any attempts at confirming or disproving existing theories, based solely on external observation. Further its close proximity (12' est.) to very wet ground and a creek with flood plain indicates that the moss growth on the rocks would have begun earlier and sustained longer than observed on similar features in other settings. Finally, what appears to be the remnants of a corduroy bridge (a primitive "Bailey bridge" of sorts), made of sawn logs or timbers, standard carriage bolts, nails and some strapping, indicate that this site has been used for the passage across the creek of wheeled or tracked vehicles for some time; other artifacts located near the site include what may be burned rubber, cable, blasting caps and some construction or earlier mining camp debris.

Plant species near this cairn site (Cairn #1) were photographed if not immediately identified, for later examination, as were some plant samples, (which were later pressed and preserved); several well-known Simpcw medicinal plants were identified, such as Arnica, Paint-brush, rose, cedar, fir, caribou lichens, mosses, and other alpine species (MJ).

Figure 6: Bridge Construction



2.6 Digital Mapping

Digitizing and Mapping Process:

1. To ensure that all TUS features identified on the hard copy maps were digitized, an inventory of sites was created in MS Excel. The inventory included Map Name, TUS_ID, and feature type (Point, Polygon, or Line). If a feature crossed over two maps, this was flagged in the inventory. The inventory then later served as a checklist to verify features as the digitizing was completed.
2. In order to accurately capture the TUS features hand drawn on the maps it was necessary to register the paper map on the digitizing tablet. This involves establishing control points to register the paper map to the geographic space of the digital base data. When identifying and selecting control points to register the paper maps a couple different base layers were used. The most common layers were the transportation and river line work from the TRIM 1:20,000 base data.
3. The TUS sites were digitized into an ESRI shape file for each of the three feature classes:
 - LUO_Lines.shp
 - LUO_Points.shp
 - LUO_Polygons.shp
4. The majority of SFN feature boundaries were digitized straight from the paper maps once registered as they did not follow base mapping features. However, where TUS features appeared to follow base map features, the line work from the 1:20,000 TRIM base map data was used to create the features.
5. The TUS_ID number was included in the shapes files as the key identifier; this is also the attribute that the TUS sites are labeled with on the map. The labels for the TUS map were created and stored in an annotation Geodatabase. The final maps were created using ESRI ArcMap.

“Simpchw yecwiminte temicw” – We are taking care of the land.¹

“In those days we were wealthy, and did not worry about our house or our food...we had plenty and were ready to share our good fortune...and we did.”²

“Simpchw identity is not best defined by the results of anthropological inquiry after all, as scholarly as this may be...on the contrary, Simpcw identity is rather best defined in our terms for our connections to our homelands...it might take a little longer, but it’s more realistic, filled with not just facts, but real truths, and a lot more fun to learn from....”³

3.1 Cultural Setting

From Simpcwemc perspective, we are first and foremost the sole proprietors of our territory “Simpchwul’ecw”, [*simpk-ol-okw*], consisting of our places and landscapes, histories and heritage, much as described within The Memorial to Sir Wilfred Laurier.⁴ Further, Simpcw is a Nation of people who have lived exclusively in the homelands as described herein, since time immemorial. We continue to maintain our traditions, familial ties and rights to country, expertise and intimate landscape knowledge specific to our territory, a territory within which the Yellowhead Mining Inc.’s Harper Creek Mine is proposed (see Simpcwul’ecw map, Figure 1).

Simpchw, or the North Thompson Division of the Secwepemc (Shuswap) was one of 32 distinct Secwepemc bands which occupied much of the Interior Plateau of what is now much of British Columbia prior to depopulating disease epidemics and other forms of colonialism of the 19th and early 20th centuries. Owing to these external impacts, the number of Secwepemc bands has decreased to 17 contemporary communities today. As one of these 17 contemporary member bands of the larger Secwepemc Nation, we, the Simpcw, speak *Secwepemctsin*, which is one language of the more wide-spread Interior Salishan language family.⁵

We share a number of cultural similarities with other Interior Salish groups. Beyond a common language, these similarities include the seasonal use of kekulis (semi-subterranean houses), specialized large-catch fish and game harvesting technologies (fish weirs, dip-nets), tool technologies and materials, a belief system, territorial maintenance through familial networks which necessarily include inherited hunting and trapping territories, and fishing places, and trading partners. Connections between Secwepemc peoples and neighbouring groups were

¹ Paraphrased from Joe Jules’ statement in *Simpchw First Nation Community Plan Brochure*, p.24.

² Paraphrasing the *Memorial to Laurier*, 1910.

³ Simpcw, Joe Jules, *perscomm*, March 2011.

⁴ *The Memorial to Laurier*, 1910.

⁵ M. Boelscher, *Field Notes*, 1985-86.

maintained through marriage between, for instance Tqéqelkemoc and Simpcw, or Upper North Thompson and Lower, respectively.⁶

At the same time, each of the Secwepemc groups maintains distinct regional differences.⁷ Each Secwepemc group is responsible for being stewards of its homelands, which necessarily includes the protection of and respect for each other's territorial boundaries.⁸ Other differences include the Simpcw use of game chutes and traps, used largely for caribou and elk, and our use of bison products obtained through trade networks not immediately available to other Secwepemc nations. Further, there are slightly differing regional dialects of Secwepemctsin, audible to even foreign listeners. These linguistic differences further assist in distinguishing us as Simpcwemc from residents of other Secwepemc regions.⁹ Notably, we are often referred to still as having a "Northern Shuswap" dialect.

With respect to our identity and connection with Simpcwul'ecw, its expansive area encompasses a huge diversity of geographies, ecologies and resources, some of which required the development of regionally specific travel and occupation knowledge, and technologies for resource harvesting. While many plant and animal species are found across the entire Interior Plateau, certain populations are more abundant in specific areas, and where reflected relative to other Interior groups, are found to be more frequently referred to in Simpcw ecological knowledge, oral history, local archaeology and environmental study.¹⁰

3.2 Territorial Setting

Simpcwul'ecw is the largest of the Secwepemc territories,¹¹ encompassing north-west Adams Lake, Canoe River, down to the Big Bend of the Columbia River, over into the headwaters of the Athabasca River, north to Mount Robson, Tête Jaune Cache and Jasper, then north west above the Upper Fraser and nearly as far north as 54 degrees North Latitude. Mount Robson and the attendant halo of cloud around its peak provided a visual reference for travel and served as notification of Secwepemc, specifically Simpcwemc, territorial authority in the region. At 2743 meters above median sea level (mamsl), if you could see the mountain you were in or near our country.

The following excerpt illustrates the early recognition of our territory by even very foreign travelers, specifically Iroquoian hunters, trappers and guides (Great Lakes people working for the NWCo), sent into the Interior from Jasper House. For their own reference purposes, they would often re-name physical landmarks in relation to their proximity to a post, or, in this case by the post manager's name.

⁶ James A. Teit, *Memoirs of the American Museum of Natural History*, Reprint from Vol. 2, Part 7 of the Jesup North Pacific Expedition, New York, G.R. Stechert & Co., 1909

⁷ See Teit, 1909; Boelscher 1984- 1992; Ignace 1992, 1999, 2005; Kuipers 1974 and 1989; Muckle 1988, Mohs ; Bouchard & Kennedy 1995; Simpcw Elder's Interviews 1989; Hudson's Bay Archives – *Thompson's River Post Journals* and *Alexandria Post Journals*; G.M Dawson 1891; Fisher, 1977 ; Palmer, 1975 ; Ray, 1939..

⁸ *Map Showing the Shuswap Territory*– Teit, 1909

⁹ *Ibid*, Boelscher, *Field Notes*.

¹⁰ *Secwepemc Cultural Knowledge of Select Species At Risk*: Appendix 6, 2005:

¹¹ *Ibid*, James A. Teit, 1909,p. 471

This highest peak in the Canadian Rocky Mountains was called Yuh-hai-has-kun, "mountain of the spiral road," by the Shuswap Indians, from the appearance of a track running around the mountain. [However]...It was already known as Robson's Peak by 1863 when Milton and Cheadle passed by. It may have been referred to as Mount Robinson as early as 1827, according to a now lost copy of fur trader George McDougall's journal...The most probable of the contending theories about Robson's name, although one discounted by [historian A.G.Harvey, 1937], is that it was named after Colin Robertson (1783-1842), a Hudson's Bay Company officer. Both Robinson and Robertson were often given the slurred pronunciation Robson. In 1820 Robertson, in charge of the Hudson's Bay Company post of St Mary's on the Peace River, sent a company of Iroquois fur hunters across the Rockies to the area around Tête Jaune Cache. This party, with Ignace Giasson in command and Pierre Bostonais ("Tête Jaune") as guide, must have passed close to Mount Robson and may have named it after Robertson.¹²

Of particular interest here, in regards to naming and territorial recognition, is that Swanson's (2002) research indicates that not only did Iroquoians *not* re-name the peak in their own language, nor in French, but the Cree who have frequented the Robson's Peak region for many generations also did not re-name it, other than to refer to it as "The Big Mountain", and its only known local aboriginal name is the Secwepemctsin Yexyexéscen.¹³ ("Yuh-hai-has-kun", as first interpreted by G.M.Dawson, 1892, is used in that form in the Provincial and National Parks tourist literature.)

Simpcwul'ecw territorial northern boundary thereafter follows the Upper Fraser River trench as far as Goat River, above present day McBride. To the west Simpcw territory is bounded by the Lakes Division (*Stytemc* or "Canim", Lac La Hache and the now amalgamated Green Timber Band), south again to roughly Bridge Lake, where it retreats eastward again to cross the Bonaparte Plateau, and the North Thompson River at Black Pines to McClure and over to Adams Lake, taking in the top two thirds of the Lake. The territorial boundary then crosses above the Shuswap Highlands and closes the polygon again at the Columbia River, beneath Pésellkwe (*Kinbasket*) Lake.¹⁴

Our territory is not typically demarcated with dots and lines on a paper map, but is known to us by certain landforms, water bodies, and place names, which are mapped in our memories, and in those of the peoples with whom we share boundaries. Where Setétkwe (North Thompson River) flows through Simpcwul'ecw, it is known as *Simpcw'etkwe* – our river. We are able to describe complete routes of travel through the recitation of place names, which in turn reflect unique landmarks, events and activities that take place there, so that the traveler always knows where they are.

¹² See *The Spiral Road*, James. L. Swanson, Banff AB. 2002: retrieved from, <http://www.spiralroad.com/sr/pn/index.html>

¹³ *Perscomm*. Marianne Ignace, as recorded during an interview with Simpcw Elder, Chris Donald, 1985.

¹⁴ *Ibid*, James A. Teit, 1909, p. 471; also see Simpcw Territorial Map, Fig.1

3.3 Relationships with Others

In accordance with the symbiotic relationships maintained with neighbouring Secwepemc peoples, as Simpcw have historically honoured our good fortune and through formal mutual agreements, shared our resources with others of the larger Secwepemc Nation, particularly along our communal territorial boundaries.¹⁵ This is specifically observed in the shared salmon fisheries with *Tk'emlups* (Kamloops) and our cousins at *Styetemc* or Canim Lakes, on the North Thompson and Raft Rivers, and in the use of caribou hunting territories from north of Adams Lake, throughout the TumTum, Oliver, Finn and Avola Creek areas,¹⁶ shared with members of the Shuswap Lakes division. Other resources such as salmon fishing sites along the Fraser are also shared with us by the Upper Fraser Secwepemc. The following communication describes the protocol of sharing as it was traditionally practiced and much as it is today:

...When people looked after the tamicw (land), in the proper way, they were recognized as the Yecweminem (guards or guardians) of those lands. The management of those lands happened through a process called Spallulukw ta Yecwiminte re Tamicw which means to gather for the purposes of looking after the Land. Within this process the chiefs of the nations met with the people and discussed with them the upcoming year's activities on the land. This process involved the Yecweminem or the ones recognized as the guardians of the land which was usually the heads of the families from the bands who were responsible for looking after the hunting, fishing, foods, and medicine on the land in certain areas of the nation. Each band belonged to a division and each of these bands was given an area to look after. These areas were recognized from band to band and the heads of families [kweseltken] were responsible for looking after the management of resources in their areas. When one band had a need to approach the areas of another band they went through a protocol where the chiefs met and recognized the Yecweminem of the areas. These people were approached and recognized as the guardians of these areas and were then asked for permission to come out onto the land and hunt within the areas or fish or gather foods and medicines. This process was followed through and quite often involved families related to one another either through blood relation or marriage. This process is still recognized in present day and often relatives still go out on the land together and hunt. This process is reciprocal and often leads to trade and barter for goods and foods and medicines between the bands.¹⁷

Interior peoples in general practiced this form of respectful pursuit of permission to use resources or to cross country, and generally speaking those of the Interior Salishan culture, particularly Secwepemc could be expected to also either bring a gift for their hosts, or to share in the profits of combined labours. Reciprocity is a fundamental element of our social and

¹⁵ Ignace and Thomson, *ibid*

¹⁶ *Secwepemc Cultural Knowledge of Select Species At Risk*, 2005, p.22

¹⁷ *Perscomm*, Joe Jules, Simpcw, 18, April, 2011.

cultural fabric, and was and is practiced not just as a matter of polite ritual, but as a practical and meaningful act.

In pre-colonial times Simpcwul'ecw was bounded to the north-northeast around what is now Jasper National Park, by Sekani, roughly along those west-facing slopes as far south as Goat River and northern Dakelh to the south and west of there, meeting at just north of today's Bowron Lake Park. Sharing boundaries with us at Soda Creek to the north, where the southern Dakelh, from whom we would often obtain moosehide, and to the west, Tsilhqot'in who provided us with dentalium shells and goat and sheep's wool fabrics,¹⁸ which they in turn obtained from peoples farther west; south of them were the Upper Fraser and Canyon Secwepemc Divisions, from whom we could obtain stone work materials, clothing and made baskets, dried fish, and trade for rarer exotic items they had obtained from the coast. Our territorial boundary did not extend as far south west as to be in direct contact with the Lillooet, or Nlaka'pamux (*Thompson Division*) but we often traded to and from these nations through middle-players whose lands lay between us.

Our cousins to the south, the Shuswap Lakes people, provided us with tulle for mat-making, made baskets, and surpluses of harvested goods specific to their homelands. Our trade relations with K'tunaxa and Okanagan were intermittent and limited to items suitable for transporting, as we might only meet up with them at seasonal gatherings in the very far south. While we had good trading relations with Siksika and Nakoda in the Yellowhead Pass and foothills around Entrance-Hinton, again at what is now Banff, Lake Louise and Saskatchewan River Crossing, Golden and Radium, our interface with them was largely seasonal and trade-related, and on the whole mutually beneficial. We also hunted to a limited extent in the foothill country of their territories, and allowed them to take fish and to hunt the same way in ours.¹⁹

To illustrate the degree to which we all knew and recognized each other's territories and identity, we provide here a short text about names; people had their own names for themselves, and we had names in our own language to distinguish between groups as well, long before all these were either supplanted, or anglicized into what you see today. On our northern boundaries, we traded with Tsay Keh Dene (*Sekani*) and Dakelh (*Carrier*), called by us in total, "Yū'nehana;"²⁰ to a lesser extent we traded with the Dunneza, (*Beaver*), of the southwest Peace country, for their fine pelts and moose hides, and whom we called "Sekao'lamux"; at Jasper and east into the foothills with Nakoda (*Stoney*), Hohe Nakoda (Assiniboine), and Piikáni (*Peigan*) and Siksiká (*Blackfoot*) and K'tunaxa (*Kutenai*) in the southeast, at the southernmost reaches of our territories.

¹⁸ Teit corroborates this in his discussions of trade and garment manufacture, 1909.

¹⁹ See text of the *Memorandum of Agreement made in duplicate at Windermere, District of [] Kootenay, Province of British Columbia: , 27 September 1895 File #1398* (Windermere Agreement), between the Kootenay (*K'tunaxa*), the Shuswap Indian Band (*Kenpesq't*), and the Stonies [sic], of Morley, Northwest Territories [AB]

²⁰ We further assigned names for the sub-groups of Yū'nehana, according to their locations, in relation to our own, thus: the people living above us on the Fraser River, we called "*Steka'lltxemux*", and those of Alexandria, or the farthest from us, we referred to as "*Stkema'ksemux*".

Following traditional protocols triggered with intermarriage between groups,²¹ or by extended invitation, or by previous arrangement, entrance into Simpcwul'ecw for the purpose of harvesting was, and remains by informed consent. In addition, we travelled extensively through other Secwepemc territories, conducting trade missions, harvesting plant products, and visiting distant family,²² so it was in our interest to maintain good relations with our neighbours. In particular, the annual western trek across the Bonaparte to the Green Lake "gathering" involved our crossing into country belonging to Upper Fraser and Bonaparte Divisions, and meeting to trade, and converse, seek suitable potential marriage partners, and to participate in gaming and competition with all manner of other visiting Secwepemc people.²³

Simpcw did, however, demand the respect of those neighbours with whom we did not share linguistic or familial ties, and are observed in both the oral and written records as defending their country from Sekani, *Nēhiyaw* (Cree) and to a lesser extent, *Anishinabe*, (Staulteaux), as well as Dakelh and *Tsilhqot'in* at various times in pre-contact and early post-contact history.²⁴ It should be noted here that groups from the north eastern area were not as inclined to acknowledge and readily participate in the Simpcw rules for sharing our lands. Their cultures are different and they have their own methods for sharing. As discussed below, the somewhat ambiguous relationship we maintained with some of these groups was, at different times, markedly peaceful and fraught with the need to seek either restitution or recompense for their pilfering of our resources. Isolated incidents occurred which, typically, were not preceded by other groups approaching us for permission to access food, medicines, furs, or a short-cut across the country.

Teit's map²⁵ illustrates a temporary period where Sekani attempted to expand into Simpcwul'ecw during the mid-to-late 1700s probably to take advantage of the fur trade traffic, but also to alleviate hunting and fishing pressures in their own country. The Sekani are depicted as occupying the territory at that time in a narrow finger running along the north drainage of the northern Fraser, roughly parallel to what is now the border between BC and AB. A documented account of these Sekani making attempts to pilfer North Thompson resources (such as salmon and arrowstone), is outlined by Teit (1909) where, in approximately 1785 and 1786, Tqéqeltkemoc at *Pesqlélten* (Finn Creek fishery) suffered attacks by Sekani. We were able to muster numbers from within Simpcwul'ecw and wreak revenge on, and restitution from, the visitors. Simpcw and Tqéqeltkemoc captured some of the Sekani women first as prisoners and then allowed them to join our people as wives, and later in the winter, hunted down and eliminated the balance of the Sekani group. This successfully ended the thieving.²⁶

²¹ Inter-group marriage occurred to a limited extent between Simpcwemc and non-Secwepemc, as seen in boundary communities such as Soda Creek, Jasper House, K'tunaxa and Lillooet, and with some Tsilhqot'in to the far west, and Okanagan in the far south, to a lesser degree.

²² James A. Teit, 1909 p. 471

²³ Marie Matthew, 1986a, *Introduction to the Shuswap People*, p. 15; also see Teit, 1909:557; Dept. Indian Affairs, 1881:193; O'Reilly, 1881b.

²⁴ See James Teit, 1909, p.454.

²⁵ *ibid*

²⁶ James A. Teit, 1909, p.548

Other stories told by Simpcw Elders²⁷ describe skirmishes with some *Nēhiyaw* nationals attempting to expand their hunting territories west into Simpcwul'ecw. This occurred in either poor salmon yield years, or in a bid to supply more northern and eastern posts (likely Jasper House or Rocky Mountain House) in the early 1800s. Again, Simpcw guardians hunted down the intruders and sent them packing all the way back to the other side of the mountains. As a result, however, Simpcw people adopted three of the *Nēhiyaw* women, two of whom, Mary and Tessie, became matriarchs in Simpcw genealogical history. Mary was married to Louis Sisyuluc, father of George Sisyuluc, informant to James Teit, somewhere around the late 1830s.²⁸ Teit further confirms that strangers caught trapping, hunting, or plant gathering within the territory of another group were divested of their loot, driven off or killed.²⁹ Moreover, depending on the severity of the crime, further restitution was often sought and negotiated until justice was considered rendered.

Other territorial disputes, defence of homelands and ousting of strangers and raiders are evident in the histories of such places within Simpcwul'ecw, as *Snine⁷ellcw* (Owl's Nest) near Vavenby, and *Kelentem* (Battle Mountain) in today's Wells Grey Park.³⁰ More recent battles are recalled in 1989 by Simpcw Elder Chris Donald who was born around 1910 and whose grandparents were alive during the conflicts. In particular, Chris described one conflict which transpired around 1870 against a party of *Nēhiyaw* at the mouth of Raft River where subsequently the dead bodies of most of their warriors were cremated following a battle with Simpcwemc, leaving a "white ash" deposit on the earth. The white ash served as a reminder to potential transgressors.³¹

These existing territorial dynamics became particularly volatile as the pressure to supply the fur trade in its later years with goods and services became less tolerable and more competitive as fur and food species became depleted,³² and the never-ending demand to supply posts and forts with salmon and venison forced trade and resource sharing restrictions. As fur trade competition increased, HBC attempts to expand traditional resource territories became more marked, the dynamics ultimately created more vigilant enforcement of territorial boundaries and limits to proprietary tolerance, particularly in the sharing of salmon fishery sites and product near trading posts.³³

Indeed, the only armed conflict on written record that occurred between Secwepemc groups, took place between Simpcwemc and Upper Fraser Secwepemc in the Williams Lake area, around 1835. This conflict probably occurred over stressed hunting and fishing resources, given that the fur trade was in full swing in the region by then. The fur trade would have increased

²⁷ See Marianne Boelscher Field Notes (MFBN) Anthropology Transcripts, 1985.

²⁸ *Ibid* MFBN, 1985; Mary is the grandmother of Catherine Louis, b. 1869-d. 1950, who married Abel Jules b.1858-d. 1910; Catherine became an influential, multi-lingual and highly educated Elder, who learning from her Elders, passed on much of the cultural knowledge to her own children and other members, and even acted as a mid-wife and nurse throughout Simpcwul'ecw for much of her life.

²⁹ Teit, 1909:227 and 1900:293

³⁰ See *Existing Maps of the Aboriginal Territories of the Shuswap Nation*, Marianne Ignace, 1989:103-108

³¹ *Ibid* See quotes from Simpcw Elder Chris Donald's 1989 Interview, pp. 106-107

³² Brian R. Schefke, *An Environmental History of the Hudson's Bay Company's Fur Trade in the Pacific Northwest: a Thematic Overview*, April 2004

³³ Ignace and Thomson, *ibid*

the pressure between peoples along previously shared boundaries to defend their lands and then to raid others. The Upper Fraser Shuswap was met on a number of occasions during this conflict with Simpcwemc defensive forces fortified by *Nēhiyaw* warriors (probably by then these were Simpcw in-laws).³⁴ In general, however territories were defended overtly, using organized military might, only when a threat to resources or disrespect for protocol was evident. Generally, the Simpcwemc usually chose to negotiate settlements peacefully and with lasting agreements in place.³⁵

Within Simpcwul'ecw, while the lands and resources belonged to all Simpcwemc, individual hunting, trapping territories and fishing places were respected, shared when appropriate and gained through inheritance, so internal conflict was seldom at issue over these rights. That said, this is not to diminish the existence of the occasional blood feud, or conflicts between individuals, as being human, these things did occur, but rarely over territorial resources.³⁶ On the other hand, there is general agreement within the ethnographic research³⁷ confirming James Teit's statement,

*All the land and hunting grounds were looked upon as tribal property all parts of which were open to every member of the tribe. Of course, every band had its common recognized hunting, trapping and fishing places, but members of other bands were allowed to use them whenever they desired...Fishing places were also tribal property, including salmon stations...at the lakes everyone had the privilege of trapping trout and erecting weirs.*³⁸

It should also be noted here that very clear boundaries were acknowledged in areas of increased economic or political intensity, or where there was a cross-sectioning of diverse ethnolinguistic groups, as seen in the early post-contact Soda Creek and Alexandria areas. The *Nazkot'en* (Southern Dakelh), referred to the Soda Creek Secwepemc (some of whom were members of Styetemc, or *Canim Lake* Simpcw), and indeed all other Simpcw bordering their homelands as "Athnah" (also written in the early literature as "Athnah" or even "Atnaugh"³⁹) or "strangers", "people not of us". Although there was some intermarriage between Simpcw, *Nazkot'en* and *Lheit-lit'en* (*Northern Dakelh*), by and large these non-Secwepemc peoples limited their harvesting to their own territories, except where sharing protocols permitted invitational use. Further, on the 1812 David Thompson map, located on the eastern bank of the Fraser River, Thompson situates what he calls the "*Sklim-hoo-lim-oo.*" Boelscher, an

³⁴ *Ibid*, p.105: Ignace also points out that the long relationship between Simpcwemc and Cree, "was, at best, ambiguous" as at some points in history there was definitely blood spilled; however, generally, the later years (1870's and onward) were marked by more inter-marriage and mutual assistance. The one major exception to this is the story of *Pitel* or Peter "One Eye", baptized Fidele Moyis, and was a grandfather to Elder Chris Donald. *Pitel* was kidnapped around 1870 by some Cree and taken to their homelands east of Jasper House, but escaped and made it home to *Tsoqwtsoqwellqw*. Also see Marianne Ignace, PhD. *Anthropological Expert Witness Report re: R. v. Denault et al, .R.v. Lebourdais et al*, 2000:30.

³⁵ *Ibid*, Ignace, 2000.

³⁶ See Teit, 1909:542

³⁷ See *Simpcw Oral Histories*, Teit, Ignace, Thompson and Ignace, Boelscher, Muckle, Mohs.

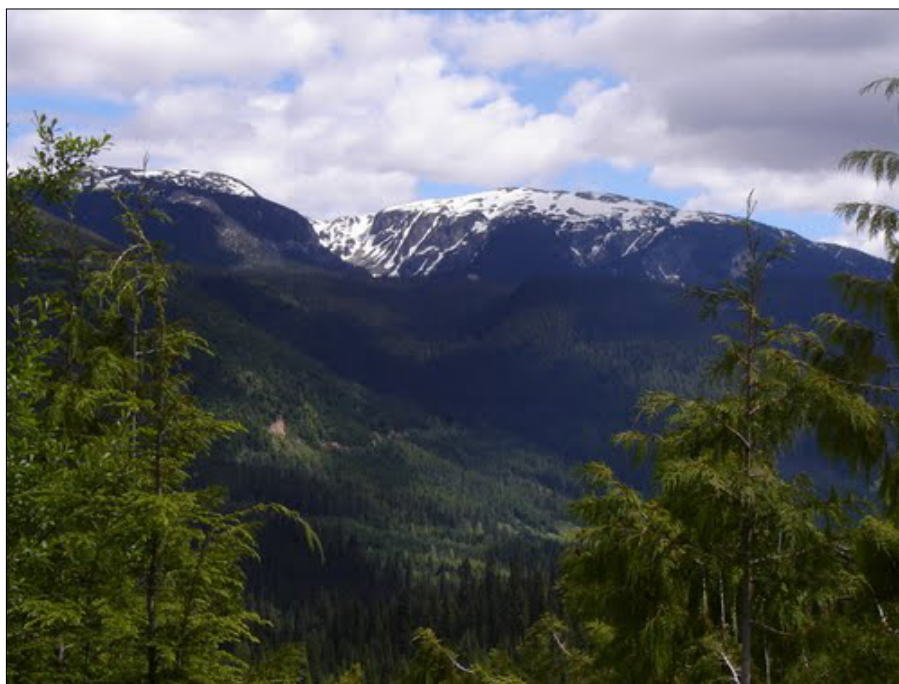
³⁸ See Teit, 1909:572

³⁹ Fraser, Simon *Letters & Journals of Simon Fraser 1806-1808* (Toronto, 1961); Thompson and Ignace, 2005:17

accomplished linguist and fluent speaker of Secwepemctsin, clarifies this label as Stemcwulecwemec, which is the *Fraser Shuswap* name for the Northern Secwepemc people “...the most powerful nation in these Countries.”⁴⁰

The recognition of our distinctness by others, and our effective responses in the defence of our territory, while also exercising our powers to share, and to extend invitation, as well as striving to maintain good relations with others, reaffirms and demonstrates Simpcwemc sense of identity and territorial occupation of our own homelands.

Figure 7: Harp Mountain



It is clear from a review of the archival literature and historical maps that the Harper Creek Project is within Simpcwul’ecw. Teit’s map and his descriptions of the Secwepemc tribes is compelling evidence in this regard.⁴¹ McDonald’s map is also instructive and helpful.⁴² Ignace’s research on Secwepemc divisions further validates Teit’s work.⁴³ Beyond this,

most historical maps define a Secwepemc boundary but are too vague for accurate analysis of boundaries.

Identifying claims of other Secwepemctsin-speaking peoples to the area where the mine is located is tricky. The difficulty resides in the fluid nature of Secwepemc boundaries in the historical era. Ignace notes, for example:

Another important point to raise is the fact that among First Nations, boundaries were not usually fixed straight lines which were arbitrarily set on a two-

⁴⁰ David Thompson, *Map of the North-West Territory of the Province of Canada, from Actual Survey Notes during the years 1792-1812.*

⁴¹ Teit 1909

⁴² McDonald 1927

⁴³ Ignace 1998

dimensional map, but they included both fixed points [demarcating] the coming-together of nations (prominent landmarks, i.e. rocks; watersheds, mountain peaks, river banks, lake shores, etc.), and “buffer-zones”, or areas of overlap and mutual use.”⁴⁴

There are questions, then, about the rigidity and solidity of lines drawn on maps like Teit’s.⁴⁵ For example, the historical record for Neskonlith and Adams Lake territories leave questions about their claims to the Harper Creek Project area. Teit associates both “tribal subdivisions” with the Shuswap Lake Division.⁴⁶ Teit’s map shows a line between the North Thompson Division and the Shuswap Lake Division running between Adams Lake and Shuswap Lake, well south of the Harper Creek watershed.⁴⁷ Further, Ignace reproduces Teit’s division and map.⁴⁸ In sum, Teit’s map offers no supporting evidence for a claim by Neskonlith or Adams Lake Bands in the Harper Creek Study Area.

The work of the Indian Reserve Commissions (British Columbia 1876-1910) emphasizes the community divisions between Simpcw as North Thompson Indians and Neskonlith as South Thompson Indians. The Final Report of the McKenna-McBride Commission lumps together, however, the Neskonlith, North Thompson, and Canoe Lake peoples (British Columbia 1916); this lumping is likely administrative in nature, and not necessarily reflective of cultural, historical, or geographical connections beyond those associated with Secwepemctsin neighbours.

As noted above, other interpretations of the historical record are possible. Following Ignace’s acknowledgement that wars, marriage, and treaties could bring communities together, just as they kept them apart, further genealogical research would help identify connections between the Simpcw people and their neighbours – or resolve overlapping claims to the Harper Creek site.

⁴⁴ Ignace 1992:6

⁴⁵ Teit 1909:450

⁴⁶ Teit 1909: 454

⁴⁷ Teit 1909:450

⁴⁸ Ignace 1998:204

Our own systems of governance worked for us for a long, long time. We lived according to a reciprocal relationship with tamicw, our land: the land's ability to look after us, and our ability to look after it.

Joe Able Jules 2011

4.1 Social Organization⁴⁹

Simpcwemc, like other Secwepemc people, functioned as “a profoundly egalitarian society,”⁵⁰ although some groups to the west, along the Fraser did adopt some ranking systems from neighbouring groups more influenced by coastal cultures. Simpcwemc society instead has at its elemental core, that reciprocal relationship which necessitated the maintenance of small, seasonally mobile, largely self-governed units of a few families each, which we call *kweseltken*, whose central authority was that of elder males and their wives and children.⁵¹ There might be five to ten adults, some youths and other Elders, and lots of little ones in your *kweseltken* and this was the primary living, teaching and political unit. It was easier on *tamicw* to take only what was needed from it, so it could regenerate enough to look after small groups, and in turn you would monitor the behaviour of the animal and plant life and their habitats in your home area. All that was required to set-up camp was either brought with us every year, or we could construct what we did not have from the surrounding landscape, with the collaboration of the people in our *kweseltken*, though sometimes we would also have help from cousins and in-laws not far away. Several *kweseltken* together would constitute a “band”, occupying a “range” or one or more watersheds within that region.

It was also more effective to teach small children their lessons for living well, to teach moral and spiritual well-being and to instil a sense of fair play and accountability to the older ones, and to show direct leadership to all of them through example and through the repetition of important narrative and story, when people lived in small, mobile communities. Our technologies were complex and required a great deal of individual skill development,⁵² and still other daily functions required the skills of cooperation and collaboration with other people. We also had specialists whose individual contributions to higher learning and teaching ranged from becoming proficient in other neighbouring languages, customs and cultural peculiarities (to us), to hide-preparation and lace making, basket building and weaving, to medicine, surgery and

⁴⁹ The material in this section is largely represented here through our knowledge, and summaries of Elder information. It is however, corroborated by academic writing, and is so denoted in the text through footnotes.

⁵⁰ See A. Ray, 1930

⁵¹ *The Shuswap(Secwepemc)* [Draft], Marianne Boelscher Ignace in *Handbook of North American Indians*, Washington DC, Smithsonian Institution 1994:21.

⁵² See for instance the description of building marten/fisher traps as briefly described by Sam Joseph, November 07, 1984, interviewed by Gordon Mohs, for *Elder Interview Transcripts, The Alliance of Tribal Councils: North Thompson Band: Sam & Angeliq Joseph*, pp. 105-111.

healthcare, hunting, trapping and trap building, trading and fishing technologies and plain old bush sense.

Tool manufacture technology alone took many years for a young individual to learn and to perfect, and the subtle nuances between bone, antler and stone types, weights, uses, edge preparation (without breaking the tool), were just the beginning. You also needed to know where to get whatever it was you needed, and that also had to be learned from someone who was good at it. It fell largely to our Elders, and other special knowledge keepers to do this kind of teaching and so to not have them in your *kweseltken* would be like not having over half of your knowledge library, or your “archives”, and no mentors to show you how to use that knowledge.

Adults and able bodied Elders and youth, undertook most of the bull-work within a *kweseltken*, from packing and unpacking, to setting up camp and striking it later, building bridges and repairing houses, cache pits and scaffolds. A great deal of the heavy resource harvest resulting from good hunting, fishing and plant and berry gathering, trapping and processing of food product, manufacture of equipment, and much of the butchering and tanning fell to younger people, under the watchful eye of experts. Most work was collaborative between the men and the women, but there are some things that men claimed they did better than women, so they got to do those things, such as digging out a cottonwood log for a canoe, or mining stone for points and blades, packing fresh killed meat quarters to the processing sites, pulling large nets of fish out of cold, fast-moving rivers, building cache pits and teaching wrestling, throwing, and bow and spear hunting. While the cooking was just as often a shared undertaking, men also cooked for and fed themselves and made or mended their own clothing, working gear and footwear.⁵³

Women typically specialized in the processing and preservation of meats, fish, plant products and medicines. In addition, they produced fine tool points and hunting and fishing equipment, and they snared and shot small game, built equipment for other jobs, hauled water, made containers and clothing and dug roasting pits, and they were the primary collectors in and monitors of the berry patches, *skenkwiknem* (“spring beauties”, or “wild potato”) and other root and bark-producing sites. Everybody shared their food, and good fortune and bumper harvests were distributed between all families; everybody also played *lahal*, learned to sing and tell stories, and sometimes during a harvest where several *kweseltken* would unite to share the work, at end of the day new stories would be told, gossip traded and lessons learned. It is the belonging to a *kweseltken*, or a “sense of belonging to or affiliated through birth and socialization with [primarily] their father’s bands” that provided the ties between that unit and other such groups, and therefore to certain home country, and other parts of Simpcwul’ecw as well.⁵⁴

⁵³ A Brief Description of the North Thompson Shuswap Culture History, Nathan and Marie Matthew, Simpcwemc, Simpcw First Archives, 1978:16

⁵⁴ See Franz Boas *The Shuswap. Part IV, sixteenth report of the British Association for the Advancement of Science*, Leeds, 1890:637 and Ignace 1994: 21. Note: Traditionally, kinship was reckoned through the father’s line, particularly in the assignment of names for boys; however rights to country and access to the relevant resources was reckoned through the maternal line.

4.2 Governance

In terms of political decision-making, issues were first dealt with among the older members of your *kweseltken*, and often Elders would meet with those of other neighbouring *kweseltken* to consult on a more regional basis, with someone with great speaking and consultative skills representing us at that level. At other times, several *kweseltken* constituting a “band” would be represented at a larger council of several bands by hereditary band leaders called *kukpi*⁷ now called “chiefs”. Still, when it came to major decision-making, like the resolution of conflict, or the regulation of harvesting areas, it would be a council of *kukpi*⁷ who would meet, in the company of trusted Elders and advisors, and senior military strategists as appropriate. Because traditionally *kukpi*⁷ were raised to fill that role left to them by the passing of their father, uncle or male step relation, they had a very good idea of the political relations between people within and outside of their bands and those outsiders with whom Simpcwul’ecw borders are shared.

A Simpcw *kukpi*⁷ was not showered with special privileges, nor did he accumulate great material wealth at the expense of his people; in fact, he was expected to share in all functions of life much the same as anyone else. However, his role as *kukpi*⁷ did require him to consult with his Elders and mentors before acting, to see to the general welfare of the band, settle internal disputes, approve or reject marriage pairings (particularly if these were politically beneficial or perhaps objected to by members), regulate resource use and calculate harvest enterprise and returns, attend political meetings and be eloquent enough to effectively represent his people in all matters that required it. He was also expected to maintain a moral, tolerant and productive life, and to be fair in his dealings with his people. In the case where a dying *kukpi*⁷ had no suitable male successor, a council of Elders would assemble and consider carefully who of the most effective and suitable males in a band would be elected or appointed to the position. In honour of the appointment, and to publicly endorse the new *kukpi*⁷, often a large feast would be held, with other bands in attendance that would then spread the word in their own areas.

4.3 Resource Sharing Among Family

People were also adopted when it was appropriate, and sometimes children were orphaned, and placed with relatives from other *kweseltken*, and often persons captured by Simpcw when left behind by their own people as a result of a skirmish would do penance as a slave, until such time as they were permitted to become citizens and even marry into the band. Simpcwemc women tended to move to the home of the man’s *kweseltken*, and their sons would carry his name, but access to lands and resources was reckoned through the woman’s territorial association. So, for example, if a *Tqéqeltkemc* man from *Pesqlélten* (Finn Creek) married someone from *Styetemc* (Canim Lake), or *St̓yéltsucw* (Barriere), they would be able to frequent and judiciously access resources in her home country, as well as in his mother’s. While not all couples practiced this right all the time, it demonstrates one of our ways of reducing harvest pressure in an area, by giving people the option of moving around the landscape, sometimes not returning to his *kweseltken* until later in the year, in time for the preparation for

winter. The rights to harvest in Simpcwul'ecw were extended to women who married out of the division, and into a neighbouring Secwepemc group (such as *Tk'emlups*, or *Skeetchestn*), but depending on distance, those rights might only be exercised semi-annually, or as travel and logistics could be accommodated. Marriage outside the ethnolinguistic group (exogamy) reduced the frequency of resource access through marriage, largely because such practices might follow a different system within the receiving culture group, or again, the distance might preclude more frequent visits. People managed though, and as a result, we have relatives living in Styetemc, Kenpesq't, Tk'emlups, Williams Lake, but also farther afield in Tsilhqot'in, Sekani and Dakelh country, as well as a number still resident outside Jasper National Park, in the Edson and Hinton areas of Alberta.

4.4 Our Local Communities

Ours was a seasonally mobile life, which would ensure that our stewarding of harvest areas would sustain us and maintain balance within the ecosystems we relied upon. During those months where we remained in winter quarters, we relied heavily on stored goods, however, we still harvested fresh fish from frozen over lakes and rivers, and we would sometimes hunt deer and elk and would often stew up the meat from skinned fur animals. Our winter homes were well established communities, and were often the places at which we would re-convene at specified dates during the rest of the year, particularly for feasts and celebrations, or as points of assembly prior to heading for the annual gathering at Green Lake.

- **St̓yélłtsucw** (*Barriere Townsite*) - The southern sect of the Simpcw Nation traditionally head-quartered at St̓yélłtsucw with satellite villages to the north (i.e. Nehélesten) and south at St̓éxwem, or *Louis Creek/Exlou*, and some scattered through the Barriere Lakes area, Dixon Valley and Upper Louis Creek drainages. St̓yélłtsucw stretched from the sheltered flats in what is now the Bradford subdivision) down to where the (Barriere) River meets Simpcw⁷etkwe.

The geographic location of this village was strategic in a number of ways, particularly in terms of being able to safeguard Simpcw resources farther north and inland from the main routes of transportation along the North River. These resources included fertile harvesting areas and water bodies which are interdependent on each other, and many of which ultimately drain into Simpcw⁷etkwe, thereby providing upstream annual migration routes for anadromous fish species. Many of the more easily accessible food and medicine harvesting areas, in addition to what is now Genier Lake and Leonie Creek, are located in the Upper Barriere River and Harper Creek ranges. Hunting trails and transportation routes from the main village to the caribou ranges, TumTum and Pesqélten all originated at St̓yélłtsucw.

In order to accommodate 1870s immigrant settlement in the North Thompson, it was from St̓yélłtsucw that the Joint Indian Reserve Commission relocated us first to Tseqwtseqwelq (*Red Willows* reserve on today's *Dunn Lake Road* flats, a

few kilometers north of Barriere Townsite), only to be relocated finally, after several years of severe flooding of that village, farther north to Neqwéqwelsten (present day ChuChua).

- **Pesqlélten** (*Finn Creek*) – Primary and preferred headquarters of the Tqéqeltkenc, or Northern sect of the Simpcw Nation, although, many kweseltken might opt to winter across on the Canim Lake or Bonaparte Plateau, or farther north near present day Tête Jaune Cache. Pesqlélten was strategically located close to traditional caribou migration routes, as well as fertile fisheries and trapping country, and provided a hub of communication between the upper reaches and the western and southern communities.

4.5 Simpcwul’ecw Is Like a Garden of All Things for Us

Although Simpcwemc are renowned as hunters, we consistently relied upon the seasonal salmon harvests, *Kekesu*⁷ (*spring salmon*), *Sqlelten*⁷*uwi* (*Sockeye*), and other species fisheries, in those rivers and creeks that accumulated a considerable run such as *Pesqlélten* (Finn Creek), *Ct’swenetkwe* (Raft River), and *Simpcw⁷etkwe* (North Thompson River within Simpcwul’ecw). In *Simpcw⁷etkwe*, at *Ckukwe*⁷ (Fishtrap Canyon), just south of *St⁷yélltsucw* (Barriere), Simpcwemc constructed salmon traps made of poles and upright stakes in the form of a “fence”, or “barriere” of enough substance to slow down the movement of fish long enough to be gathered by hand nets, which were then hauled up onto the high banks on either side of the “fish-trap.”⁵⁵ These salmon runs were not nearly of the scope of the Sockeye runs as seen at the mouth of Adams River, but they were sufficient to sustain our nutritional needs and also provided enough surpluses for preserving and trading. This system of harvest was constructed in such a way that only a small percentage of fish would actually be caught, allowing the balance to make it to the spawning grounds to begin the new cycle.

We would also spear, net, gaff and jig other species of fish from the shoreline of the North Thompson, Barriere, Louis Creek, Raft River and other contributing creeks and small rivers, as well as from some of the exceptional *Pisell* (trout) lakes on either side of the Valley, particularly *Yiucwt* (Dunn Lake), and others, such as *Spa⁷sxt* (Harper Creek), within the Study area. In the northern reaches of Simpcwul’ecw, whitefish would be speared from canoes, at night using pitch-lamps, and was a highly successful fresh fish harvest technique.⁵⁶ *Tsqwmus* (suckers) and *Qwe⁷ek* (grayling) would also contribute to the menu depending on the time of year and number of people immediately on hand to feed, and in the Columbia valley, sturgeon was hunted with baited hooks, spears and nets.

However, much of our meat harvesting energies were also focused on species such as *Selcweyce* (caribou), grouse, waterfowl and turtle as well as *Teniye* (moose), elk, *Sxwetey* (Big Horn sheep), *Tsi⁷* (deer), *Stsesuye* (porcupine), marmot, occasionally *Skemcis* (Grizzly bear), *Kenkekem* (black bear) and mountain goat, in accordance with the seasonal movements and

⁵⁵ James A. Teit, 1909, *ibid*

⁵⁶ Cheadle, W.W. 1931, *Cheadle’s Journal of a Trip Across Canada 1862-63*, p.245

annual production of preferred available sustainable food and material resources within our homelands. We knew when to avoid hunting during the birthing season of each species, as they do not all occur exactly at the same time. Much of our fine winter clothing, leather, buckskin and rawhide were produced from these species, and tanning and preparation of materials sufficient to sustain our needs required a great deal of knowledge of country and animal behaviour to meet our own demands, and to produce surplus for some external trade. Even the snaring, spearing or shooting of small game such as marmot, turtle or grouse required great skill and dexterity, and physical strength.

Qelqelescen (Baldy Mountain) was known by us to be home to small, but sufficiently numerous mountain caribou bands so that as they travelled through the general area, they could be judiciously harvested. Individual caribou were sometimes speared, but typically a small group were run into a corral at the edge of a wooded area, slaughtered and processed close by. It is the nature of our caribou to rarely vary their travel patterns or schedules, and because they occupy the higher elevations, hunting them required planning and logistical coordination, and the collaboration of a number of people at once. We knew almost to the day when herds would be crossing *Simpcw⁷etkwe* (North Thompson River) on their way to the mountains on the other side (either to the *TumTum*, or to Battle Mountain, depending on the time of year), as we would see the animals loosened hair floating down the river, and we know their trails, which have been etched into the ground for centuries.⁵⁷

Figure 8: Baldy Mountain



Not only did caribou prefer high snowy country, but in order to capture enough of them to make the effort worthwhile, existing corrals needed to be repaired, often new drift and wing fences built and sometimes new corrals had to be constructed from scratch.

Elk were similarly hunted and processed, and deer were taken as needed,

usually individually, as were, Big Horn, Mountain Goats and moose. Some individual hunters would be particularly good at specific aspects of hunting, and might specialize in these areas

⁵⁷ Nancy Jules, *Interviews North Thompson Indian Band TUS*, 1998

(i.e. tracking, spotting, setting deadfalls), to the extent that they might do most of their family's hunting solo but when it came to larger annual hunts, collaboration and the merger of expertise and many hands ensured successful returns. In addition to the hunting crew, the processing experts needed to be relatively close at hand, so that the meat could be either smoked and processed for drying, or packed out to a main camp as quickly as possible. On other occasions, this would mean skinning, quartering and stripping and re-wrapping the meat and drying or caching some of it in a satellite camp, and sometimes it would be packed down to main camp and dried and smoked there. All major hunting was ultimately a community, or at least a family function, and much of the fresh meat was distributed among those in our *kweseltken*, and any visiting family, although some was dried and preserved for either giving to other families, or cached for later use.

Simpcw were one of the only Secwepemc groups to conscientiously pursue and utilize bison products as part of the trade with Eastern Slope and prairie peoples, particularly bison hides for robes and leather products, long before the advent of Europeans.⁵⁸ However, *Kenpesq't* also plied an opportunistic trade in bison products with K'tunaxa, Nakoda, Siksika and others in the southern Columbia foothills, often producing considerable quantities of dried salmon in preparation for such exchange. While our people were not known to participate in the "Hunt" [*sic*] *per se*, there is considerable ethnographic and archival evidence showing their use of these traded bison products.⁵⁹ Other ethnographic accounts of mountain-dwelling peoples refer to the use of bison hides not only serving as outer cover in mobile structures, but with the hair left on, a winter bison hide affords an ideal floor in the winter home, in high elevations where deeper foundations could not be excavated.⁶⁰

Simpcwul'ecw is known for its rich regional diversity of workable stone⁶¹ for the construction of *Studyile* points and other tools, and while we conscientiously protected such resources, we would selectively trade tool, point and surgical (obsidian) stone with neighbouring peoples, whose country did not produce material of such high quality.⁶² Our *Kulkulqenten*, or what is now known as "Green Mountain" provided us with a workable blue-green stone, from which smoking pipes were made, and this was also traded among other groups who did not have such resources in their homelands.⁶³

The harvest of plant products played an equally large role in our nutrition, spirituality and trade, as well as in the production of medicines and treatments, and in the construction of technologies and housing, clothing, and adornment.⁶⁴ Plant harvest was a constant activity during the spring, summer and fall months, and transpired in conjunction with almost all other travel, hunting or fishing ventures. As the plant species were diverse, required in substantial

⁵⁸ Teit, 1909

⁵⁹ *Ibid*, Teit, (also see Milton and Cheadle, Kane, *et al*)

⁶⁰ Kalman. H., and E. Mills, *Architectural History: Early First Nations*, retrieved from website: *The Canadian Encyclopedia*: <http://www.thecanadianencyclopedia.com/index.cfm>

⁶¹ Possibly a blue-green nephrite or jade type stone, used for pipes, axe heads, and pestles by Secwepemc, specifically Simpcw, described by Elders, and as found in the archaeological record.

⁶² See Kujit, I. 1989, *Subsistence Resource Variability and Culture Change during the Middle-late Prehistoric Cultural Transition on the Canadian Plateau*. Canadian Journal of Archaeology 13:97-118

⁶³ See M. Boelscher, *Field Notes –Simpcw Elders Oral Histories*, 1985-86

⁶⁴ James A. Teit, 1909;

quantities, processing sometimes extensive, and with elevations and ecosystems often disparate and quite time consuming to access, the collection and use of plants took a considerable level of knowledge and skill, human effort and collaborative organization.

Based on the ethnographic and ethnobotanical research conducted by Boelscher (1984-1989), Ignace (1998 and 2005), Compton (1990), Turner (1977, 1978, 1979, 1982, 1991) Palmer (1975), and Parish Coupe & Lloyd (1996), and the vast data base of botanical species and ecological knowledge provided by our Simpcw Elders and contemporary plant harvesters, there exist several hundred plant names still in use, in Secwepemctsin,⁶⁵ many of which are still gathered and used today.

Elders recall trips out into the bush to specific places, at particular times of the year, to collect and process plant products, and their recollections indicate an intimate, detailed knowledge of places and travel routes between them.⁶⁶ In addition, many of the plant species harvested, and otherwise observed by Simpcwemc served as indicators for the advent of other phenomena in the bush, sometimes through the observed degree of robust flower or fruit production, frequency and density of distribution, occurrence of interdependent organisms (fungus, insects, etc). Often these indicators would signal seasonal feeding or reproductive behaviour and migration movements of caribou, elk, waterfowl and other bird species, as well as deer, moose, salmon and bear, at various elevations. A typical, if oversimplified example of this is that when certain riverine plant species such as Red Willow (cane willow) is budding at lower elevations, moose are calving in similar settings higher up, and once they browse out the areas closest to their calving site, they will be on the move to wetter country as the pond and marshy areas begin to provide forage.

Figure 9: Deer Sign in Local Study Area



⁶⁵ See B. Compton, *Secwepemc (Shuswap) Botanical Terminology*, (Draft) 1990.

⁶⁶ See for instance *Simpcw Elders Chris Donald and Lizette Donald Interview Transcriptions*, interviewed by M. Boelscher, 1985-1986

Plant gathering included species from fir to horsetail, mosses and grasses at the Engelmann Spruce-Subalpine Fir elevations of 1700m, and below in the Interior Cedar-Hemlock zone, we harvested (and still do on occasion), paper birch, red cedar, and Kinnikinnick, among others. The Interior Douglas Fir elevations housed many more of the berry, bulb and root producing plants such as Saskatoon, *xusem*, wild potato and balsam root, as well as the giant black cottonwoods we used for our big dug-out canoes.⁶⁷ Hunting camps in this area also facilitated the collateral gathering and processing of seasonal plant products, particularly berries, and Elders recount many stories of travel and camps, people, lessons and adventures they experienced as the work was being undertaken, sometimes for weeks at a time. In particular the plant and berry gathering trails used to cross the mountains through what is now the Study area are well known as they span several important small watersheds and interconnect with other networks of trails originating farther south and east leading to Saskum, North and East Barriere, as well as Genier Lakes, and some main trails rejoin the northward route to Vavenby, TumTum, Messiter and Avola.

4.6 Trapping for Fur

The extent to which fur trapping was practiced by our people, both for our immediate use and for trade, is embedded in our traditional knowledge and is carried in our oral history. Our harvesting technologies and uses for fur, as well as our trading networks are discussed in further detail below. Further, our trapping territory and processing activities have been documented in the early fur trade journals,⁶⁸ and subsequently quantified in their District Returns reports,⁶⁹ as to the volume, type and origin of the species rendered. While there is ample evidence that primarily beaver, in the earliest days of the post-contact trade was produced by Simpcw trappers in notable quantities, there was a lesser demand for marten, fisher, fox, black bear, lynx and bobcat (though in later years, these latter three were more often hunted). For our own uses, a variety of species provided for our immediate needs, and included rabbit, muskrat, marmot (again usually shot, either with bow and arrow, or later with a hunting rifle), and occasionally badger and wolverine. Teit (1909) records much of this information as it was relayed to him in his 1903 visit among us.

Traditional Simpcw trapping technology and frequency varied according to species ecologies and preferred terrain, seasonal availability and food resource, fluctuations in population and demand. Clothing, bedding, some internal organs (glands and bladders), and greases (bear grease, beaver castoreum), and fats were all important products of our trapping ventures, and several specific technologies were perfected to achieve the year's catch as long as conditions permitted. Long before either the arrival of the fur-trading companies, settler bounty-hunting⁷⁰, or the trap line permit system imposed by the colonial government, our fur trade

⁶⁷ *Final Report Clearwater Forest District Traditional Use Study within Simpcw Traditional Territory*, 1998: pp.51-52.

⁶⁸ See, for instance, John McLeod, *Thompson's River Post, Journal Notes*, September 1823.

⁶⁹ Hudson's Bay Archives, Thompsons River Post, New Caledonia District, also Okanagan – Thompsons River Returns, 1821-1847

⁷⁰ A particularly memorable example of the localized eradication of species, is the relentless wolverine conducted for cash by Chas. Fadear, in the 1890's throughout the Louis Creek watershed, effectively wiping out an essential element and creating a long-lasting imbalance in the

was a highly regulated and well-governed enterprise. As indicated above, trapping was an activity that was conducted on lands that were strictly designated to the rightful operators, recognized as such by others, and typically inherited from one generation to another, to ensure that the vital ecological and wildlife knowledge required for sustainability was maintained. Both men and women were proficient at harvesting fur-bearing animals, and the processing of hides of all types would often be conducted by all present. Snaring and dead-fall trapping were two typical technologies used in the harvest of most fur-bearing animals, particularly beaver, however following the introduction of steel traps by the Iroquois fur hunters of the NorthWest, and later the Hudson's Bay Companies, these trap styles were used more frequently for rabbit and other small species.

Simpcw Elders such as Chris and Lizette Donald recount trapping activities in the early 20th century prior to the government enforcement of its trap line permit system. Chris was given his 1935 trap line near Irvine, by Lizette, when they were married, and she, in turn had received it from her first husband Michel John (Tomma), upon his death. Chris had also trapped on his father's line across the river (presumably across from Irvine), with his step-brother Alfred Sam (Baptiste). Manuel Eustache had a trap line that stretched across the "Indian Range", or the mountains behind (east of) the Reserve, until much of the habitat was destroyed partially by fire, the remaining trap line was demolished by intensive logging from there through into the Study area following the second world war, and subsequent indiscriminate non-Aboriginal open hunting eradicated much of the ungulate and predatory fur species.

In 1986 Marianne Boelscher systematically collected and transcribed Kamloops Fish and Wildlife-Trapping Department trap line permit and tag applications, and requests to have trap lines transferred from one generation member to another, made by Simpcw trappers, dating from the 1930's through 1960's. While not all members accepted these regulatory impositions, some dutifully filled out increasingly detailed and convoluted forms, receiving equally complex and difficult to understand responses, often requiring a circuitous route involving several bureaucratic agencies to obtain permission. If applicants did not report their trapped animals, or re-apply for their permits in the time allotted then they would arbitrarily lose their rights to their trap line. In addition, as Lizette Donald remembers,⁷¹ the government required applicants to trap only spring beaver, which is against Simpcw law and tradition, as that is the time of year that beaver typically produce their young, and limiting beaver harvest to nesting time would effectively wipe out the species locally in short order. In addition, not only did the Fish & Wildlife office requirements have to be met, but every such transaction had to be approved by the Indian Agent's office, creating further delays and maintaining the stifling controls on Aboriginal life imposed by that office.

The data presented by Boelscher's work also shows that there were several permitted trap lines maintained throughout the first 60 years of the century by Simpcwemc and these locations probably reflected previously held trapping areas, maintained according to Simpcw tradition.

ecosystem, and reducing the availability of wolf pelts for our own needs (see under Chas. Fadear section in *Exploring our Roots – North Thompson Valley McLure to Little Fort 1763-1959*.

⁷¹ *Ibid*, Chris Donald and Lizette Donald, 1985-1986

There are two registered lines that cross-sect the Harper Creek Mine Study area, and one other within 5 km of the Study area north boundary, as recorded in the permit documents.⁷² Loss of habitat and limited returns on fur are the primary reasons for the reduction of trapping and trap-line maintenance as it occurred toward the end of the 1960s. However, much of the place and travel route knowledge, and trapping/processing technologies and wisdoms remain current in the oral histories and collective memory of Simpcwemc.

4.7 A Brisk Trade

Trade was a substantial function of all Interior cultures to varying degrees, however, Simpcwemc participated in considerable direct and indirect trade with other neighbouring Interior Salish groups, such as *Tk'emlups*, Lakes Shuswap, *Nlaka'pamux* and Okanagan, to the south, from Canim Lake with *Tsilhqot'in*, *Dakelh*, *Sekani*, and from the upper Simpcw (*Tqéqeltkemc*), with *Nakoda*, *Neyihaw*, *K'tunaxa*, and *Siksiká* and *Piikáni*, and indirectly with coastal and prairie groups farther afield. Elders still remark on the great travel people used to undertake in the conducting of trade, and of the renown of our people for our ability to know where to meet the demand for diverse trade goods:

That's probably why our villages sites are spread all over...the Shuswap people were known to really travel a lot...You wanted something, go ask the Shuswap...how to get it, where to get it."⁷³

While much of our country provided an abundance of salmon, medicines, berries and roots, which we would collect for ourselves and for trading as well, we were also fortunate to have in our lower elevations, hazelnut trees, and we did a brisk trade in these as (primarily winter food), with all of our trading partners whose lands did not afford them. We also were able to trade in mined arrow and tool stone such as chert, bluestone, basalt and obsidian, jade, some of which we obtained here, and some of which was traded for elsewhere in surplus specifically for selling or trading at a profit to others. Caribou, lynx, wolverine, beaver, marten, fisher and marmot meat and hides, which we obtained here, were also traded with our neighbours, long before the European/Canadian fur trade came to town.

The maintenance of successful trading relationships contributed to a generally stable existence for Simpcw, as the procurement and generation of trade goods from within the territory guaranteed further procurement of necessary goods and materials from without; trade conducted with goods obtained from other partners more distant from their market groups, enabled Simpcw traders to create a profit as intermediaries. In this way we were also able to maintain control over what came into and what went out of our territory, in terms of trade assets, much as other groups practiced for the same reasons.

It was into this complex network of existing multi-national Interior trade routes and relationships complete with fluctuating supply and demand, politics and protocol, that first the

⁷² Simpcw First Nation Traditional Use and Occupancy (Clearwater and Finn Creek areas) 2011.

⁷³ Paraphrased from Kenpesq't Elder Audrey Eugene, *Kenpesq't Traditional Land Use Study*, 2009:127

Russian (indirectly through intermediary peoples to the northwest, during the proto-contact period here), and later the French, and British fur industries and exploration efforts entered in the mid-to late 1600's. As discussed in greater detail below, it was long after initial contact with Europeans, that our previously fairly stable cultural systems and populations began to change dramatically.⁷⁴

4.8 Post-contact Life in Simpcwul'ecw

Our oral history and knowledge of early post-contact life are corroborated by the daily journals of trading post clerks, traders, explorers, and clergy. These records confirm our territorial boundaries and our stable presence within it dating from the mid-1700s. Some writers have recorded their observations in great detail, clearly describing the land, travel routes, people by name and by nation.⁷⁵ Further, the works of several writers, among them Teit (1909), Ignace and Thompson (2005), and Ray (1939) note that fur trade activities undertaken in our region, primarily by the NorthWest Fur Co., and later Hudson's Bay Company, largely generated an expansion of already existing trade networks, and did not necessarily create new power imbalances within these relationships to begin with, but ultimately facilitated the increased protection of the harvesting territories, and greatly intensified the harvesting volume of pelts as the demand for furs in Europe became insatiable. Collateral to this occurrence was the phenomenon of the un-naturally high increase in the harvesting and trading of fish to supply the growing number of fur trade posts and personnel. The intensity of trapping toward the middle of the century very nearly decimated the traditional beaver and muskrat populations in our territory, as we were no longer practicing our selective trapping approaches.

In general, relationships here between post and brigade staff, management and later their blended families, sustained a relatively peaceful and mutually beneficial exchange of goods and services. Irrespective of some of the personal musings of various post clerks and factors, local groups did not plot the demise of Company men and, aside from some cultural faux pas and misunderstandings, Secwepemc nations tended to tolerate the existence of the traders, and eventually provided for their protection in their respective and other territories, kept them fed and guided them through unfamiliar country. In fact, as Ignace and Thomson (2005) point out, had the relationship not been mutually beneficial, it would have been quickly and systematically eradicated by the various nations forthwith, as at this point, other compelling factors that might influence such compliance were not yet in place.

Our own genealogical records show evidence of the blending of families through intermarriage with Anishnabe, Iroquois and other fur-trade importees, to the extent that, particularly in the northern reaches, through the Yellowhead and upper North Thompson, the resulting families strengthened ties between otherwise disparate communities of isolated single males. The strength of Simpcw culture was such, however that with a few exceptions, where women

⁷⁴ Teit (1909) details traded goods and those made/prepared specifically for trade and makes note of the trading partners doing business with Simpcw and neighbouring groups.

⁷⁵ See Annotated Bibliography for references for Archibald MacDonald, John Tod, Alexander Anderson, John McLeod, The Overlanders, Milton & Cheadle, Paul Kane, Fr. DeSmet, and others.

moved with their husbands and families farther east at the close of the fur trade, most intercultural marriages resulted in the retention of Simpcw culture and shared resource access and residence based within Simpcwul'ecw. When the promise of a reserve dedicated to our people in the Tête Jaune Cache area was rescinded in 1913, the 70 or so remaining members regrouped here at what is now Chu Chua. Even with this intermarriage and blended families, and the resulting in multilingualism⁷⁶ and limited integration of technologies (Anishnabe beadwork floral patterns, some legging and clothing styles, and the particular French influence of flour, sugar and fried foods), we have retained our cultural distinctiveness.

Other lasting effects of the presence of eastern Canadians and Europeans in our homelands, first as a result of the trade, and later by miners and settlers, however, are evident in Simpcw post-contact history, not the least of which are the early disease epidemics, which in the space of 100 years decimated Simpcw population by 1918, to one third of its original stable state of about 1200-1500 souls. Diseases such as smallpox are estimated to have been present in the southern Interior possibly as early as 1808. Measles was present in the northern Interior by 1830 and observed again in 1847-48. Additional epidemics in varying severity included whooping cough, and mumps, and the devastating 1918 Spanish Influenza; all diseases were introduced to populations that did not possess the immunities or medicines to counter their effects. Isolation of victims was not easily achieved in communities where logistics required the close daily contact among individuals, particularly children and Elders, and since several of these diseases were transferred with an incubation period, many people inadvertently carried them ever farther to areas not yet affected, before symptoms appeared.⁷⁷

With each successive assault on populations, some not six or eight years apart, and often targeting either the aged or the very young, three major phenomena occurred to impact Secwepemc culture and make it vulnerable to the unstoppable front of colonial mandates of land and resource acquisition, and re-populating the country with its own. The three phenomena are summarized below, and articulate the effects on the remnant Interior populations in general:

- “Everybody died” - entire *kweseltken* were decimated, often with only one or two members surviving, only to be adopted by others soon to be affected; this means that sites were now left unpopulated, and often discovered by others unable to identify the bodies, or too weak themselves to bury their dead⁷⁸;
- “Knowledge destroyed” – with the passing of each Elder, invaluable knowledge and narratives of the past became disparate within the system, resulting in successive generations being raised by adult survivors who struggled to maintain and pass on what knowledge they had learned; many of our health specialists,

⁷⁶ Some of our ancestors spoke several languages, and children spoke fluent Secwepemctsin, as well as Anishnabe, Chinook, and michif, as they were the dominant trade languages of the region and period.

⁷⁷ See A.J. Ray, *Diffusion of Diseases in the Western Interior of Canada, 1830-1850*, in *Geographical Review*, 66(1976):139-157; and R. Boyd, *Pacific Northwest Measles Epidemic of 1847-1848*, *Oregon Historical Quarterly*, 95, no. 1, (1994): 6-47; and R.M. Galois *Measles, 1847-1850 – The First Modern Epidemic in British Columbia*, in *BC Studies*, no. 109, Spring 1996: 31-43.

⁷⁸ See R.M. Galois, 1996: 40-41

t'kwilc also died in these waves of illness, leaving the easing of pain and care of the sick and dying to those who had little knowledge of such science.

- “*Site use discontinued*” – with the reduction in labour-force and expertise, resource harvest and the logistical service of sites was almost impossible in some cases, for instance in the building and maintenance of large fish-traps, bridges, scaffolding and net systems, as well as in the construction of meat and hide processing camps, the establishment of new *kekulis* and repair of old ones.

Our Elders have recounted stories of the losses of family due to disease epidemics; in particular the complete destruction by smallpox of the *kweseltken* (of a total of 50 people), at what is now Louis Creek⁷⁹, and similar incidents at Barriere and Little Fort (1862), that similarly caused the complete disappearance of the Canyon Secwepemc (originally at the confluence of the Tsilhqot'in and upper Fraser Rivers, near Dog Creek),⁸⁰ with the few remaining survivors to be absorbed by Canim Lake and Chu Chua communities. In 1882 the Kamloops Indian Agency reported the resurgence of fatal measles and an early influenza which struck in the winter time, and killed great numbers of young children, and again in 1888, 1892, with the 1918 influenza reducing the surviving population by another third. Eventually these diseases were eradicated through the distribution of vaccines, allowing the remaining Simpcw survivors to re-establish a stable population at Chu Chua, and Canim Lake.

It was into this vulnerable human landscape that the Catholic Church (and subsequently others) in the visage of the Oblates of Mary Immaculate entered the scene in 1866, to establish missions at Kamloops and Williams Lake. They went about baptizing members of every Secwepemc community, attempting to convert each one, and in the course, begin ostensibly, the process of alienation from tradition, independence and beliefs. However, for as much publicity as this and subsequent attempts at conversion and early assimilation have since garnered, Ignace (1995) reports clear articulation from interviewed Elders in various Secwepemc communities that such conversion never really took hold in substance, and that people by and large integrated only those church-borne rituals and behaviours they found useful into their existing worldview, beliefs and spirituality.⁸¹

This initial establishment of church based influence in the Interior did, however, pave the way for the later establishment of a much more devastating phenomenon in the form of Indian Residential and Industrial Schools, a collaborative assimilation tool conceived and implemented by church and government together. Much authoritative and well researched material has been written on both the initial and the intergenerational impacts of residential school on the Aboriginal peoples of this country in general, since very few school aged children (sometimes as young as four, but rarely older than 13), anywhere escaped the system, and some of this material very specifically records the Secwepemc experience at Williams Lake and particularly

⁷⁹ Elder Chris Donald in *M. Boelscher Field Notes*, 1985-86, held at Simpcw Archives; while it bears more detailed research, this incident may be the one described by Cheadle in his 1863 journey notes, regarding the strewn bodies of Simpcw villages along the North River.

⁸⁰ See L. C. Hamm, *Shuswap Settlement Patterns*, Master's Thesis, Dept. of Archaeology, Simon Fraser University, 1975.

⁸¹ Marianne Ignace, *Anthropological Expert Evidence Report*: 1995:13-14.

at Kamloops over their operational history of the best part of a century (1893-1977).⁸² More research however is required into the localized experience for Simpcw members *visa vis* the impacts of the institution, as well as into the actual policies and enforcement of them by the collaborating agencies. Moreover, given the contemporary condition of Simpcw vibrant retention of language and tradition, as well as oral history knowledge, more documented research into the manner in which we have retained this knowledge should be conducted, and recorded for our future generations.

Throughout the post-contact period up until 1858 when BC became a colony, there were no official policies limiting Aboriginal land use in the Interior. From that date through the turn of the 20th century, and well into the post Second World War, Indian policy, and the subsequent development of Indian Agencies, both federal and colonial (prior to BC becoming a part of Canada in 1871), and the various Commissions struck to resolve the on-going land procurement mandate and the issues of Aboriginal resistance to this, began to impose ever-more limiting restrictions on traditional economies and technologies, including fishing, hunting and trapping, access to resources, and mobility. As clearly stated by the assembled chiefs as signatories to the Memorial to Sir Wilfrid Laurier, these restrictions and prohibitions, by the year 1910 had become untenable and the general Interior leadership had vowed to bring their concerns to the attention of the Canadian leaders, and if need be, the Queen herself. However, a cursory analysis of the matters presented in the Memorial relative to those concerns expressed by the Aboriginal leadership of today reveals that little has been addressed, and many conditions have worsened.

Much of the best available research into these over-arching policies and their impacts on Aboriginal peoples in BC is presented in Robin Fisher's *Contact and Conflict*, (1996). Fisher's book provides a chronology of the primary colonial policies in BC that followed the waning years of the fur trade and served to alter our relationship with non-natives thereafter. A condensed discussion on the subject of policy development between the Dominion government, and that of the Province, is provided by the Union of BC Indian Chiefs' web-site.⁸³ Further, the UBCIC research department produced for Simpcw First Nation an undated document⁸⁴ which chronicles the development of the five Simpcw reserves,⁸⁵ from their inception in 1877 through the various pre-emptions, re-shapings and reductions due to the construction of the CNRail tracks running the full length of the reserve. Several roads were also build to accommodate various mines situated on three sides of the reserves.⁸⁶

These four North Thompson Indian Reserves were not finalized until 1885, and the fifth, Boulder Creek (North Thompson IR#5), was allotted in 1915 to accommodate cattle grazing for

⁸² See Celia Haig-Brown (Vayro), *Resistance and Renewal*, 1988; also see *Behind Closed Doors: Stories from the Kamloops Residential School*, Agness Jack, 2006, and *Residential Schools, a Chronology*, 2010, retrieved online from pivakootihi.communityofficeonline.com; also see *The Kamloops Residential School: Indigenous Perspectives and Revising Canadian History*, Jenna Foster, UBC, Honours Essay, 2010.

⁸³ <http://www.ubc.bc.ca/Resources/ourhomesare.com>

⁸⁴ See Simpcw Road Right-of-Way Report, UBCIC Research Department (Specific Claims), undated but originated after 1992.

⁸⁵ These four original reserves are: North Thompson and Canoe Lake (main reserve) 3220 acres, with smaller fishing stations at Louis Creek, 8 acres; Little Fort (Nehelesten), 5 acres; Barriere River, 6 acres; and the fifth, Boulder Creek with 640 acres.

⁸⁶ In 1892 John Freemont Smith of Kamloops Coal Company applied for 10 acres to be surrendered from the reserve to accommodate a "highway" from his coal mine on the east boundary of the reserve to a landing on the North Thompson River, where coal could then be loaded onto a steamer for shipment to Kamloops; Smith later became Indian Agent for the Kamloops Agency and enjoyed a long career in the position.

the band. Private settler use of some of our rangelands went unfettered for decades, causing overgrazing and the eradication of many of our root, berry and leaf bearing food and medicine plants. Some of the many other impacts resulting from colonial expansionism and the assimilation policies included the arbitrary allotment of the original reserve village (a permanent log house village) in the seasonal floodplain at Tsoqwtsoqwellqw with no serviceable road leading to the village until after 1915, the establishment of a church in our midst, the removal of several Chu Chua member families to Canim Lake.

With the increase after the turn of the 20th century in non-native settlement in our territory, we were restricted by the private property laws from travelling freely and camping, trapping, fishing, gathering or hunting in many of our most important areas. By the late 1930's and into the 40's we could no longer access the caribou hunt owing largely to the loss of their habitat due to the clear-cut logging of old growth stands, and also from being unable to travel and camp where we needed to in order to process our harvest. However, we remained resourceful and by the time of the Great Depression of the 1930's, we had incorporated a number of cash earning skills and seasonal jobs into our way of life, even if it was prohibited to be paid cash off reserve, by Indian Agency policy. People would hire whole families in the fruit-picking seasons, and for haying crews, sometimes in trade for goods if they could not pay us, and in later years, especially during the war years, several of our men worked for the CNR, seasonally, or for a logging show, a mill or a small mine, and were paid a wage. Many others still trapped and sold the furs to either George Fennell, who moved up just north of Chu Chua in 1909 and started a store, or to fur buyers who would come to the reserve.

Where access to wildlife was possible and appropriate, most men hunted and fished for their families and shared any surplus with others, and grazed a few cows, had gardens, and some raised, bought and sold horses. Still others hired themselves, their wagon or buggy and a team out to deliver goods from town, to the various homesteaders and enterprises situated along the river, once a passable wagon road was built to the Little Fort Ferry. In addition to the fur-bearing population reduction as a result of habitat loss to logging, the fur world-wide industry itself disintegrated in the late 1960s to the extent that trapping did not afford a reliable living and had to be supplemented with other work.⁸⁷ By that time, we had become citizens of Canada, and were allowed to come and go from the reserve to find work, attend school or join the armed forces without losing our government issued status and community membership.

Irrespective of all these concurrent and sometimes *recurrent* impacts, as Simpcwemc people we kept our faith in our culture and in each other, retained our identity, and safeguarded our history. Each successive generation of children were taught about where they came from and who they are, and particular attention was paid to language and traditional knowledge, including territorial boundaries, and important places within them. Today, we still honour the traditions of hunting, fishing, gathering, and sharing, and we keep our Elders and our children close to us, to the extent that we have our own nursery school day program in which traditions such as drumming and storytelling are taught, and in which Elders and other experts participate. We take both children and Elders out on the land to pick berries, roots, birch bark

⁸⁷ See M. Ignace and Thom, 2005.

and to speak the names of places, plants and wildlife. We visit sacred places and we share stories and lessons, and in this way we still pass on and safeguard our knowledge.

Resilience is a recurring theme in Simpcw cultural history as, after each depopulating occurrence, Simpcwemc people have re-grouped, pooled their knowledge and resources, kept language, cultural, territorial and genealogical knowledge alive and retained their unique identity within the Secwepemc Nation. In the years following the establishment of the colonial government in British Columbia, and the subsequent influx of first American miners in pursuit of gold in the Interior, non-native settlement and the wholesale pre-emption of traditional homelands and territories, Simpcw identity remained vibrant and distinct.

5.0 TRADITIONAL ECOLOGICAL KNOWLEDGE AND SEASONAL ROUND

5.1 Annual Patterns

Old One was the one who reminded us to be respectful to all living things. This notion of respect is at the core of our beliefs about our interaction with the land and all things in it: Xyemstém/me7xyemstec (“be respectful”) entails the management and careful harvesting of all plant and animal resources, lest they disappear on us in disgust, and we become pitiful (qwenqwént).⁸⁸

A number of sources detail elements of the Simpcw and Secwepemc seasonal rounds and traditional knowledge about plants, animals, and fish.⁸⁹ The primary historical, written source of information about Secwepemc food gathering activities – including those of Simpcw people – is Teit’s *The Shuswap* (1909:513-530). In it, Teit describes Secwepemc peoples as primarily hunting and fishing peoples. Teit is clear in his assessment of the importance of both activities. After insisting that hunting was the predominant activity, Teit states: “Fishing ... was of great importance to every band.”⁹⁰

Simpcw people conduct (and have conducted) a range of food collection activities. Typically, these activities occur in a regular sequence throughout the calendar year. Conducting these activities effectively and efficiently required the movement of individuals and families and, not surprisingly, these movements paralleled the locations where food was available. Ignace and Ignace describe this process:

From spring to late fall, Secwepemc ... travelled to and from resource-producing locations, sometimes hundreds of kilometres from their winter villages. They camped for weeks at a time, harvested foods, and prepared them

⁸⁸ (Ignace 2008:215-216; quoted by LeBourdais 2009:10)

⁸⁹ (Teit 1909, 1914, 1930; Ignace and Ignace 2004; LeBourdais 2009; Simpcw 2011, Boas 1891; Dawson 1891)

⁹⁰ (Teit 1909:513).

for winter, but living in camps was *as significant* a part of the way of life. Winter food was stored in cache pits along the way to resource locations and near camps or processing locations ... In late October or early November, during the 'entering month' when bears retired into their dens, people moved into their underground pit houses for the winter, living on preserved foods⁹¹

The following presents the seasonal activities of the Simpcw people within Simpcwul'ecw (Simpcw territory) and by Secwepemctsin-speaking peoples more generally.

5.2 Spring

Spring represents a season of emergence. Not only do the food plants start to grow, but Simpcw people start the annual round of harvesting after winters spent in pit homes⁹². As the snow disappears, root plants are dug.⁹³ Fresh shoots like fireweed, balsamroot, and cow parsnip are harvested in conjunction with bulbs. Roots were dried, boiled, steamed, or roasted and eaten immediately or cached in coiled cedar root or birch bark baskets and woven fibre bags for storage or trade. Plant species were also utilized for beverages such as Labrador tea, and for other traditional Secwepemc technologies.⁹⁴ Fishing begins at upland lakes for trout and whitefish. Beaver may be trapped. Early runs of chinook salmon are fished,⁹⁵ and spring berries start to appear and are picked by family groups.⁹⁶

Both food and medicinal plants are in use throughout the year, although fresh plants foods are typically available during the growing season of April to September.⁹⁷ The land was managed through the strategic use of fire and from the spacing of plants from which berries were harvested; larger returns followed.⁹⁸

5.3 Summer

Salmon fishing at family-owned locations begins in the summer and continues through to the early fall; weirs and traps are critical technology for catching these fish in large numbers.⁹⁹ The harvesting of salmon provides Simpcw people with a significant supply of food.¹⁰⁰ Five species of pacific salmon swim into the Thompson River watershed; this food is collected throughout the summer and through the early fall and family and community-controlled fishing spots.

⁹¹ (Ignace and Ignace 2004:383; emphasis in original).

⁹² Ignace and Ignace 2004:382

⁹³ Teit 1909:514

⁹⁴ LeBourdais 2009:4

⁹⁵ Ignace and Ignace 2004:382

⁹⁶ Boas 1891:86; Teit 1909:515

⁹⁷ Ignace 1998:208; also Turner 1997, 1998

⁹⁸ LeBourdais 2009:4

⁹⁹ Dawson 1891:15-16

¹⁰⁰ Teit 1909; Ignace 1998

Other food fish, harvested at many different times of the year from rivers and freshwater lakes, include whitefish, river trout, kokanee, rainbow trout, lake trout, brook trout, and sturgeon.¹⁰¹

More plants become ripe in the summer. Wild onions are collected in early July. Berries, like saskatoons, soapberries, blueberries, huckleberries, raspberries, strawberries, blackcaps, choke cherries, goosberries, and currents are collected through the summer months.¹⁰² Dawson explains that berry picking was controlled by women who both harvested and preserved the fruit.¹⁰³ Medicines are also collected in conjunction with fishing and berry collection.¹⁰⁴ There are 250 to 300 species used for medicines. Many are charms or are used for healing, strength, purification, and protection.¹⁰⁵

5.4 Fall

Fall is hunting season. Hunting grounds were controlled by family or village groups.¹⁰⁶ Dogs assisted in the hunting work.¹⁰⁷ Ignace and Ignace describe hunting practices from the point of view of families:

The period from August to October, when deer were fat and the fawns had matured, was the main hunting season. Task groups of related men, their parents, wives, and children would travel to base camps in or below the montane parklands. As the men hunted mule deer, caribou, and elk higher up, the women and children lived at the base camp and set snares to trap small game. They deboned and dried the game brought in by hunters ... hunting also occurred throughout the year as necessary, as when families gathered for a funeral or had run out of meat.¹⁰⁸

Teit also offers a detailed list of the animal and bird species harvested by Simpcw people. Teit's list includes: deer, elk, caribou, marmot, sheep, hare, beaver, grouse, bear, moose, duck, crane, squirrel, porcupine, and turtle.¹⁰⁹ Bison was also pursued by Simpcw families.¹¹⁰ Ignace notes that while fishing provides a high percentage of Simpcw nutrition, hunted meat provides almost as much food and that hunting is a prestigious activity. Further, notes Ignace, hunting is more important than salmon fishing for Simpcw people.¹¹¹

Frequently, moose, elk, deer, and caribou are hunted in conjunction with fishing late run sockeye and coho salmon. Huckleberries, blueberries, and medicines are also collected at this

¹⁰¹ see Dawson 1891:15, Teit 1909:513

¹⁰² see Dawson 1891:20; Ignace and Ignace 2004:382; Simpcw 2011:58

¹⁰³ Dawson 1891:21

¹⁰⁴ Ignace and Ignace 2004:383

¹⁰⁵ LeBourdais 2009:4

¹⁰⁶ Boas 1891:86

¹⁰⁷ Boas 1891:84-85

¹⁰⁸ Ignace and Ignace 2004:383; also LeBourdais 2009:3-4

¹⁰⁹ Teit 1909:513; Ignace 1998:207; Simpcw 2011:56

¹¹⁰ Simpcw 2011:57

¹¹¹ Ignace 1998:207; also LeBourdais 2009:3; also Simpcw 2011:56

time.¹¹² The end of the fall season is marked by a return to pit homes at winter village locations.

5.5 Winter

The hunting of deer, moose, elk, and caribou continues through the winter. This hunting is conducted from pit home villages, the centre of group divisions within broader Secwepemcul'ecw.¹¹³ Skins are prepared for clothing.¹¹⁴ Dried meat, salmon, and berries provide the majority of food.¹¹⁵ Some fish run in the winter, including steelhead in the Thompson River.

In sum, the processes of traditional food procurement were complicated and required training and education. Ignace and Ignace reinforce both the skill involved in successful food gathering and its connection to all aspects of Secwepemc culture: "Fishing, hunting, and gathering involve intricate skills. They enact(ed) and transmit(ted) cultural and social principles of the division of labour by age, sex, and experience, and the social cohesion, role relationships, and economic efficiency that resulted from these."¹¹⁶

¹¹² see Simpcw 2011:59

¹¹³ see Boas 1891:92; Dawson 1891:8

¹¹⁴ Boas 1891:84

¹¹⁵ Dawson 1891:15

¹¹⁶ Ignace and Ignace 2004:383

6.1 Local Study Area

Following the guidelines established in the Project Application Requirements,¹¹⁷ this report distinguishes between a local study area (LSA) and a regional study area (RSA). The Project Application Requirements state:

LSAs are defined as the project footprint and the surrounding area within which there is a reasonable potential for direct impacts to occur due to the Project components or activities. RSAs incorporate a broader geographical area where there is a potential for indirect impacts or baseline information that may be relevant to the LSA and the effects assessment.

Figure 10 shows the locations of the twenty (20) traditional use sites in the local study area. Table 1 describes the site types in the local study area and accompanies Figure 10.

¹¹⁷ From Harper Creek Copper-Gold-Silver Project Application Information Requirements (Yellowhead Mining Inc. 2011); http://a100.gov.bc.ca/appsdata/epic/documents/p333/1324486256257_52f0eacc11967dc2f94835822071af1c135a39a7fafb7a9c9345318e1c23535e.pdf

Figure 10: Traditional Use Sites in the Local Study Area

Contact SFN for Access to Map

Table 1: Sites in the Local Study Area

Site Number	Location	Use(s) and Notes
1	From Clearwater Peak, southeast to Adams River S, including Raft Peak, Vavenby, Harp and Vavenby Mountain	Food Gathering Transportation Habitation
4	Northwest of Vavenby, north shore of North Thompson R.	Place name
17	Vavenby Mountain	Place name Food Gathering
21	Area just north of Vavenby	Place name Food Gatherign Habitation Traditional History
22	South side of North Thompson River, Jones Creek watershed south to Sesq'em Lake	Food Gathering Transportation
23	Harp Mountain	Place name Food Gathering Harvesting
24	South side of North Thompson River, Vavenby Flats	Place name: Food Gathering Habitation
25	Harper Creek	Place name Food Gathering Transportation Harvesting
35	South side of North Thompson River, both sides of Chuck Creek	Place name Habitation Food Gathering
49	From East Barriere & North Barriere Lake, up Harper Creek to Birch Island	Transportation Habitation
50	North and South shores of North Thompson River between Vavenby and Clearwater; all engaged creeks; not numbered on Figure 10.	Food Gathering Harvesting Habitation
65	South side of North Thompson River, just West of Avery Creek	Place name
67	From Vavenby to Battle Mountain	Transportation Food Gathering
68	All along the North Thompson River from Vavenby to Messiter	Food Gathering Habitation Harvesting
78	Harper Creek	Place name Food Gathering
100	On Thompson River, west of Vavenby	Habitation
101	North side of Harp Mountain	Transportation
102	North side of Harp Mountain	Habitation
103	Harp Mountain	Sacred

104	North of Harp Mountain	Sacred
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6.2 Regional Study Area

The regional study area (RSA) contains 104 traditional use sites. These sites are plotted on the study maps, of which Figure 11 offers a summary. All 104 sites are listed in Table 2.

Table 2: Sites in the Regional Study Area

Site	Location	Purpose
1	From Clearwater Peak, SE to Adams River S, including Raft Peak, Vavenby, Harp and Vavenby Mountain	Food Gathering
		Transportation
		Harvesting
2	North of Mosquito Flats at N end of small Island, just N of Pennie Creek	Food Gathering
		Place Name
3	Both sides of the North Thompson River, 1.5 km N of Mosquito Flats	Food Gathering
		Place Name
4	Just NW of Vavenby, N Shore of North Thompson R.	Place Name
		Food Gathering
5	Trophy Mountain	Place Name
		Food Gathering
6	Mouth of McDougal Creek	Place Name
		Food Gathering
		Habitation
7	Both sides of the North Thompson River, from Raft River towards Foghorn Creek	Harvesting
		Processing
		Habitation
8	N. side of N. Thompson just west of Noble Quartz Creek	Place Name
		Food Gathering
		Place Name
9	Raft River	Processing
		Place Name
10	N. Side of N. Thompson, just E. of Crossing Creek	Place Name

		Habitation
		Harvesting
		Place Name
		Food Gathering
		Processing
11	Chu Chua Mountain	Habitation
		Food Gathering
		Habitation
		Burial
		Transportation
12	Baldy Mountain	Place Name
		Transportation
13	North end of Dunn Lake to NW of Baldy Mountain, then NE to Fog Horn Mountain	Food Gathering
		Transportation
		Food Gathering
		Transportation
14	Hallamore Lake NE along Joseph Creek to Fog Horn Mountain	Habitation
		Transportation
		Food Gathering
15	Chu Chua Creek N to Chu Chua Mountain, NE to Dunn Lake	Habitation
		Harvesting
		Food Gathering
		Habitation
		Burial
16	Fog Horn Mountain	Place Name

17	Vavenby Mountain	Place Name Food Gathering Food Gathering
18	Indian Range	Place Name Harvesting
19	Just W of Dunn Peak	Placenames Sacred
20	Sesq'em Mountain	Place Name Transportation Food Gathering Harvesting Habitation Traditional History
21	Area just north of Vavenby	Harvesting Transportation Food Gathering
22	South side of North Thompson River, Jones Creek watershed south to Sesq'em Lake	Food Gatherig
23	Harp Mountain, Harper Creek	Harvesting Food Gathering
24	South side of North Thompson River, Vavenby Flats	Habitation Food Gathering Transportation
25	Harper Creek	Place Name Harvesting

26	East side of North Thompson River, near mouth of Joseph Creek (Spolten)	Place Name
27	Adams Lake -Sqaam Bay	Food Gathering
		Food Gathering
		Harvesting
28	Fenell Range	Place Name
		Habitation
29	West side of North Thompson River, 2km N of Vavenby	Place Name
		Food Gathering
30	McTaggart Lakes	Harvesting
31	Neqweyqwelsten Creek	Harvesting
32	East side of NT River, just west of Dunn Lake	Food Gathering
		Place Name
		Food Gathering
33	East side of NT River, just N of Chu Chua and south of McTaggart Lakes	Habitation
34	McTaggart Creek	Food Gathering
		Food Gathering
		Place Name
35	South side of NT River, both sides of Chuck Creek	Habitation
36	Dunn Peak	Habitation
		Transportation
37	Both Sides of Joseph Creek from the North Thompson East	Place Name
		Habitation
		Place Name
38	Hallamore Lake	Food Gathering
39	Chu Chua Creek	Place Name
40	East side of NT River, just N of Skwootum Creek	Habitation

		Burial
		Habitation
		Harvesting
		Food Gathering
41	Hole in the Wall)	Place Name
		Traditional History
42	North side of NT Rive just east of CLWTR	Habitation
43	Barriere area (Styelltsuc)	Place Name
		Food Gathering
44	All around Sesq'em Lake	Processing
45	All around Clearwater, from Clwtr Creek to Raft River	Food Gathering
		Harvesting
		Habitation
46	All around Genier Lake	Food Gathering
		Transportation
		Food Gathering
47	Chinook Cove to Dunn Lake, Hallamore Lake, to Mosquito Flats, crossing @ CLRWTR, north side to Birch Island	Harvesting
		Habitation
48	Campsite North shore of North Barriere Lake, on way to Sesq'em	Food Gathering
		Transportation
		Habitation
49	East Barriere & North Barriere Lake, up Harper Creek to Birch Island	Food Gathering
		Food Gathering
		Habitation
50	North and South shores of North Thompson River between Vavenby & CLWTR & and all engaged creeks	Harvesting
51	West side of E. Barriere Lake & N & S sides of Barriere River	Food Gathering

		Transportation
		Food Gathering
		Harvesting
52	East Barriere Lake to the junction & North to North Barriere Lake	Traditional History
		Transportation
53	Chu Chua Mountain to Birk Creek to Barriere River	Food Gathering
		Transportation
		Food Gathering
54	Chu Chua to Birk Creek	Harvesting
		Transportation
55	Dutch Lake, North along east side of CLRWTR, and North along Spahats Creek	Food Gathering
56	SW of Dutch Lake, Old Clearwater Bridge	Habitation
57	All around Samotsun, Johnson Lake/Sqaam Bay	Food Gathering
58	North Barriere Lake	Food Gathering
59	East Barriere Lake - just the lake	Food Gathering
60	Sesq'em Lake	Food Gathering
61	Upper Barriere River from North Thompson River	Food Gathering
		Transportation
62	North Barriere Lake, NE to Barriere River, then on to Sesq'em, North up Fennell Creek, NE to Gollen Creek	Food Gathering
		Transportation
63	Chu Chua to Leonie Lake, NE to Sprague Creek to Birk Creek	Food Gathering
64	On Both sides of Sprague Creek up to Shuswap Highland/Chu Chu Mountain	Habitation
65	South side of North Thompson River, just West of Avery Creek	Place Name
66	McGorvie Lake(s)	Food Gathering
67	Vavenby to Battle Mountain	Transportation

		Food Gathering
		Food Gathering
		Habitation
68	All along the North Thompson River from Vavenby to Messiter	Harvesting
		Transportation
		Food Gathering
		Habitation
		Bural
69	Fog Horn Through the creek (Fog Horn Creek)	Harvesting
		Transportation
		Food Gathering
		Habitation
70	Barriere River	Harvesting
		Food Gathering
71	All around Sesq'em Lake (valley & hills)	Harvesting
		Transportation
72	ChuChua to Little Fort through Fennell's	Food Gathering
		Transportation
		Food Gathering
73	Raft Mountain	Harvesting
74	Harper Creek West to Dunn Peak	Transportation
75	N. end of Birk Creek E to Harper Cr. Valley	Transportation
		Habitation
76	Graffunder Lake area	Food Gathering
77	Graffunder Lake	Food Gathering
78	Harper Creek	Food Gathering

		Place Name
		Place Name
		Sacred
79	Small lakes on SE Fog Horn	Habitation
80	Leonie Lake	Food Gathering
81	On reserve Chinook Cove	Habitation
		Food Gathering
82	All around Leonie Lake	Habitation
83	South Barriere Lake	Food Gathering
84	Genier Lake	Food Gathering
		Food Gathering
85	Louis Creek	Harvesting
86	NE of Leonie Lake, Headwaters of Bottrell Cr.	Habitation
87	Dixon Ridge	Food Gathering
88	Johnson Lake	Food Gathering
89	From Adams Lake along Adams river to Gruffunder & Vavenby	Transportation
		Food Gathering
		Traditional History
		Place Name
90	Dunn Lake	Harvesting
91	From Neqweklwelsten to S. side Leonie Creek/Lake	Transportation
92	Ollie's Rd. to Leonie Flats	Transportation
93	SW dome of Chu Chua Mountain within site # 11	Habitation
94	Lute Creek to Fog Horn Mountain	Transportation
95	Headwaters of Sprague Creek	Habitation
96	Frog Lake	Place Names

97	Dunn Lake	Harvesting
98	SW corner of Hallamore Lake	Habitation
		Habitation
99	Raft River Fishing Site	Food Harvesting
100	Molliet's Cabin	Habitation
101	Harp Mountain	Transportation
102	Harp Mountain	Habitation
103	Harp Mountain	Sacred
104	Harp Mountain	Sacred

Figure 11: Traditional Use Sites in the Regional Study Area

Contact SFN for Access to Map

7.0 UNDERSTANDING TRADITIONAL LAND USE INFORMATION

Throughout the study, the research team documented traditional land use information related to:

- Transportation
- Resource use areas including hunting, trapping, fishing, food and medicinal plant collection areas
- Non-consumptive use areas
- Spiritual and culturally significant areas
- Habitation areas

A summary of our findings in each area is presented below. The goal here is to indicate the potential for conflict between SFN and YMI uses and interests for the same geographic area.

The “YMI proposed mine site”, is situated in the south eastern quadrant of Simpcw First Nation traditional territory, known as Simpcwel’ucw, and is located approximately 25 km NE of the Nation’s primary residential community of Chu Chua; the YMI properties also partially surround the village of Vavenby, which lies 20 km east of Clearwater and 30km NE of Barriere, BC.

For the purposes of this study the “YMI proposed mine site” includes its roads, administrative and maintenance areas, equipment parking and staff camp compounds, mine pit & tailings pond, and all other sites of mine activity. Further, the study takes into account all interdependent watersheds, hunting, trapping, camping, sacred and spiritual, plant resource gathering and fishing areas, as well as trails and habitation sites, named places, and areas known to contain significance to Simpcwemc and places along Simpcwetkwe (North Thompson River within Simpcw territory) potentially affected by the mine or mine activity .

Owing to time and logistical limitations, the recording of much of the remembered data, carried in the oral record that is of direct relevance to the study is incomplete, as not all potential interviewees with relevant knowledge were available to participate. Material gained through the analyses of existing interviews as well as data provided by new interviews, however, reflects three general historical eras, marked by age cohorts, so indicated in the summaries. The significance of recognizing age cohorts is that the impacts of various externally imposed prohibitions, economic dynamics and the effects of disease epidemics are more clearly understood as primary factors affecting land use patterns, and memory thereof.

Simpcwetkwe occupies a significant spatial, transportation and resource presence within the study area, and flows through the middle of Vavenby and Birch Island, the mouth of Raft River (Raft River Mouth camp), Little Fort, Chu Chua and Chinook Cove. Similarly, Harper Creek & Valley from Birch Island, south to North Barriere Lake occupy an equally significant spatial,

transportation, habitation, resource harvest, and water source corridor. Prior to the imposition of a reserve at Chu Chua in the late 1870s and even in the seven subsequent decades, the Vavenby–Birch Island–Raft Mouth, and Vavenby–Harper Creek–North Lake–Barriere routes and places of habitation and resource harvest were well established and remained well used as integral to Simpcwemc life, as they are today.

The study area engages six NTS map sheets at 1:250,000, numbered as follows in clockwise order, beginning with the southwestern most sheet, 092P01, directly north to 092P08, 092P209, east to 082M12, and south to 082M05, concluding with the southeastern most sheet 082M04. Because the map sheet boundaries create arbitrary lines which divide the territory, several sites and areas are situated in more than one map sheet, and will be so noted.

There are several site types illustrated by the data:

- Hunting and/or game processing sites
- place names
- travel corridors
- camping spots
- trap lines
- places for fishing for:
 - salmonids
 - trout
- plant harvesting spots
 - medicinal
 - nutritional
 - technological (weaponry, building, tools/equipment)
- mineral harvest or stone tool manufacture
- sacred/spiritual sites
- birth/death sites
- burial site
- battle sites
- look-outs
- gathering sites
- seasonal habitation sites

Shackeroff and Campbell (2007: 351) define TEK as a “culturally developed framework involving people, their beliefs about the world, and their cultural means of collecting, processing and transmitting information about the environment.” Berkes (2008, 7) offers a more complete definition of TEK as he considers the concept to be “a cumulative body of knowledge, practise, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment”. More concisely stated, anthropologists Charles Menzies and Caroline Butler define TEK as the term used “to describe the knowledge and beliefs that Indigenous peoples hold of their environments that is handed down through the generations” (Menzies and Butler 2006:6). Menzies and Butler elaborate by listing several characteristics of TEK, making it a field of study distinct from sciences like biology. According to Menzies and Butler (2006) TEK is:

- Cumulative and long-term: It develops over generations and is based on comparisons between past and present conditions.
- Dynamic: TEK changes over time.
- Historical: Because TEK is cumulative and dynamic, it provides “historical understanding” about the environment.
- Local: It is developed locally and applies intimately to local areas.
- Holistic: All aspects of the environment, and a people’s knowledge of it are integrated and interconnected.
- Embedded: TEK is part of a particular cultural context and is embedded in the everyday lives of the people who know it.
- Moral and spiritual: TEK is frequently predicated upon reciprocal relationships with animals and plants. As such, there are right ways and wrong ways to harvest local resources or, in other words, to treat animals and plants (Menzies and Butler 2006:7-10).

9.0 SFN MEMBERS VIEW OF POTENTIAL OR PERCEIVED IMPACTS OF THE PROPOSED MINE

Information gathered from interviews and discussions with community members has resulted in a number of *potential or perceived* impacts that are summarized below. These impact and concerns may be perceived or real and as such, YMI and SFN should address these concerns amongst the community members.

9.1 Environmental Impacts

Road and mining construction may impact the local SFN environment. These impacts may include:

- Increased soil erosion in sloped areas;
- Increased erosion along river and creek beds;
- Substantial amounts of water may be required during the mining process;
- Water must be discarded, is this water contaminated. How and where will this water be discarded?
- Changes to drainage patterns;
- Slope instability;
- Risk of air pollution from hazardous dust to humans, fish, birds and other wildlife;
- Increased fire risks due to human activities;
- Disturbance to animal migrations and habitations;
- Air pollution, including particulates;
- Construction noise;
- Increased traffic on existing roads;
- Environmental damage caused by new, permanent mining infrastructure;
- Degraded water quality in streams and rivers due to pollution;
- Damage to fish stocks and spawning areas from sediment, turbidity, and increased water temperatures;
- Irreversible environmental damage due to the construction of the mining quarry;
- Increased human traffic due to upgraded or new road construction

9.2 Social and Cultural Impacts

The Project may impact SFN society and culture. These impacts are, in part, a result of new technologies and job opportunities introduced to a small community. Additionally, many of the decisions related to the project are made outside of the community. As such, some of the potential impacts include:

- Short term employment followed by unemployment;
- A short economic boom followed by a longer bust;
- Unequal distribution of benefits between SFN and non aboriginals;
- Impact of an influx of “new” money on family dynamics;
- Impact of the inability of older generation SFN members to transfer traditional culture and knowledge to younger generations due to the disturbance of traditional activities along the access road and potentially the mine site itself.

9.3 Aboriginal Rights Impacts

The Project may violate SFN rights to land, hunting, fishing, gathering and trapping. Possible infringements, where SFN people lose their ability to practice Aboriginal rights, include:

- Damage to spiritual sites;
- Impact on already depleted caribou herds;
- Damage to fisheries;
- Damage to hunting territories;
- Damage to plant gathering areas;
- Damage to transportation corridors including trails, creeks, and rivers;
- Contamination of wildlife and their feed;
- Access restrictions to traditional use sites.

All of the aforementioned points have the potential to compromise the ability of the SFN people to practice their traditional livelihood and subsistence patterns within the proposed development footprint. In particular, damage to food procurement areas, and contamination of fish-bearing bodies of water and wildlife feed as a result of the proposed Harper Creek project poses a serious threat to the health and well-being of the SFN.

It is critical that the proposed Harper Creek mining development or related industrial activities occurring within or near the SFN traditional territory does not impact accessibility for the SFN people practicing their traditional subsistence activities.

9.4 Wildlife Impacts

A comprehensive list of species of flora and fauna important to the SFN is found in **Section 12 Species and Proxys**, under Appendices 1, 2, and 3. Species are organized into three separate tables according to typology (i.e. plants, animals, and fish), and are displayed in the following columns:

- Species name (English)
- Scientific name
- Secwepemctsin name (where available)
- Fish and plant correspondences (what species require this species for survival)
- Purpose of use (ceremonial, food, material, etc.)

- Time of year harvested/used
- Reference(s)

These tables are designed to provide the reader with a greater understanding of the species important to the SFN for their survival. In addition, the tables present the reader with a more tangible picture of SFN traditional subsistence patterns according to seasonal rounds, as each table describes the seasons in which individual species are harvested. Finally, the table column entitled “Fish and plant correspondences” highlights the interconnectedness between the SFN, the species important to the SFN, and the food web of said species, thus reaffirming the critical importance of maintaining ecosystem health within the SFN traditional territory.

Despite presenting a comprehensive list of species important to the SFN people, not all species of plants, animals, and fish listed in the tables may be located within the proposed project area. An examination of Keystone Wildlife Research Ltd.’s (Albrecht, 2012) terrestrial wildlife and vegetation baseline report prepared for YMI suggests that the species important to SFN listed in Table 3 may be impacted by the proposed Harper Creek mine project. The study identified and located the following species of plants, animals, and fish within the proposed Harper Creek project footprint. Importantly, YMI should confirm how comprehensive their flora and fauna baseline studies are.

Table 3: Species Important to SFN that will be Directly Impacted by Proposed Mine

Plants	Animals	Fish
Pinedrops	Wolverine	Coho Salmon
Roses (Prickly, wild, nootka, dwarf wild)	Caribou	Rainbow Trout
Blueberry (Oval-leafed, highbush, mountain, oval-leafed bilberry)	Grizzly Bear	Mountain Whitefish
Avens (Yellow)	Mule Deer	Sculpin
Juniper, common and Juniper, rocky mountain (Mountain juniper)	Fisher	Sockeye Salmon
Moss (common lawn)	Wolf	Kokanee Salmon
Sagebrush (pasture and Sagebrush, big and Northern wormwood)	Lynx	Bull Trout
Comandra (pale)	Weasel	
Brown-eye Susan (Blackeyed Susan)	Red Squirrel	
Desert-parsley (Wild carrot, Indian carrot, Indian sweet potato, Hog- fennel, Biscuit root), Biscuit Root (Desert Parsley, Hog- fennel, Cous, Camas), Chocolate Tips (Wild celery, Bitter root); Indian celery (Wild celery, Indian consumption plant, Bare-stem Lomatium, Desert Parsley); Narrow-leaved	Hare	

desert parsley, Sevale desert parsley		
Rose, prairie (Wood's rose)	Marten	
Alyssum, hoary	Moose	
Lamb's quarter (Pigweed)	Coyote	
Chicory	Bat	
Orchardgrass	Woodpecker	
Cheatgrass	Sapsuckers	
Quackgrass	Great Blue Heron	
St. John's-wort	Bald Eagle	
Alfalfa	Canada Goose	
Bluegrass, Kentucky	Chickadee	
Cinquefoil, sulphur (Common Silverweed, Cinquefoil, Indian sweet potato, Silverleaf?)	Flicker (Northern)	
Sorrel, sheep	Kinglet (Ruby-crowned)	
Mullein	Nuthatch (red-breasted)	
Dandelion, common	Crossbill (red)	
Paper birch	Hawk (red-tailed)	
Trembling aspen	Merganser (Hooded)	
Saskatoon	Grouse (Spruce)	
Thistle, Canada	Thrush (Hermit; Swainson's)	
Alder, mountain	Western Tanager	
Cottonwoods		
Willows		

Given that the aforementioned species of plants, wildlife, and fish are found within the proposed Harper Creek project area, these species will be adversely impacted by the development, and SFN access to traditional use sites will be compromised. As a result, adverse impacts upon species important to the SFN will have far-reaching effects, as there are interconnections between subsistence resources and TEK, cultural practices, and socio-economic ties to other neighbouring Interior Salish bands. Tables 4 and 5 illustrate some of these connections and the potential, related impacts.

Table 4: Examples of Correspondences between Environmental Reports and TUS Information by Species¹¹⁸

Species	Environmental Reports	TUS Research	Impacts to SFN	References
Bull trout (Harper Creek)	<ul style="list-style-type: none"> Reductions to Harper Creek and tributary water flows will impact fish 	<ul style="list-style-type: none"> Bull trout are food for SFN 	<ul style="list-style-type: none"> Reduced fish numbers, particularly bull trout Food loss (cultural loss) 	<ul style="list-style-type: none"> Aquatic Environmental Baseline Report (KP, July 22, 2012) Bill Rublee, Triton Environmental (Correspondence, September 8, 2011)
Caribou	<ul style="list-style-type: none"> Small herd in area of mine 	<ul style="list-style-type: none"> Small herd in LSA Caribou lichen and trails in LSA 	<ul style="list-style-type: none"> The herd is vulnerable to habitat loss SFN food loss (cultural loss) 	<ul style="list-style-type: none"> Wildlife Report
Rainbow Trout (Harper Creek)	<ul style="list-style-type: none"> Impacted by water temperature changes 	<ul style="list-style-type: none"> Summer-time harvesting 	<ul style="list-style-type: none"> Food loss (cultural loss) 	<ul style="list-style-type: none"> Bill Rublee, Triton Environmental (Correspondence, September 8, 2011) Bill Rublee, email correspondence with Charlene Higgins (YMI, March 14, 2012)
Rainbow Trout (Kootenay Lake)	<ul style="list-style-type: none"> Impacted by upstream water quality and temperature changes 	<ul style="list-style-type: none"> Summer-time harvesting 	<ul style="list-style-type: none"> Food loss (cultural loss) 	<ul style="list-style-type: none"> Bill Rublee, Triton Environmental (Correspondence, September 8, 2011)

Table 5: Examples of Correspondences between Environmental Reports and TUS Information by Location¹¹⁹

Location	Environmental	TUS Research	Impacts to SFN	References
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¹¹⁸ See also "Simpco Harper Creek Project Negotiating Strategy Worksheet – Environmental Issues"

¹¹⁹ See also "Simpco Harper Creek Project Negotiating Strategy Worksheet – Environmental Issues"

	Reports			
Barriere River (sockeye, coho, chinook)	<ul style="list-style-type: none"> Water quality reductions and temperature variations as a consequence of mining can impact fish downstream Kamloops Lake Rainbow Trout are potentially vulnerable 	<ul style="list-style-type: none"> Spawning river 	<ul style="list-style-type: none"> Food and culture loss 	<ul style="list-style-type: none"> Bill Rublee, Triton Environmental (Correspondence, September 8, 2011) Bill Rublee, Triton Environmental (Correspondence, November 30, 2011)
Bull trout (Harper Creek)	<ul style="list-style-type: none"> Reductions to Harper Creek and tributary water flows will impact fish 	<ul style="list-style-type: none"> Bull trout are food for SFN 	<ul style="list-style-type: none"> Food and culture loss 	<ul style="list-style-type: none"> Aquatic Environmental Baseline Report (KP, July 22, 2012) Bill Rublee, Triton Environmental (Correspondence, September 8, 2011)
Creek P	<ul style="list-style-type: none"> Reductions to water flows 	<ul style="list-style-type: none"> SFN fish in Harper Creek 	<ul style="list-style-type: none"> Food and culture loss 	<ul style="list-style-type: none"> Aquatic Environmental Baseline Report (KP, July 22, 2012) Bill Rublee, Triton Environmental (Correspondence, April 23, 2012)
Creek T	<ul style="list-style-type: none"> Reductions to water flows 	<ul style="list-style-type: none"> SFN fish in Harper Creek 	<ul style="list-style-type: none"> Food and culture loss 	<ul style="list-style-type: none"> Aquatic Environmental Baseline Report (KP, July 22, 2012) Bill Rublee, Triton Environmental (Correspondence, April 23, 2012)
North Thompson River (sockeye, coho, Chinook, bull trout, rainbow trout)	<ul style="list-style-type: none"> Water quality reductions and temperature variations as a consequence of mining can impact fish downstream Kamloops Lake 	<ul style="list-style-type: none"> Spawning river 	<ul style="list-style-type: none"> Food and culture loss 	<ul style="list-style-type: none"> Bill Rublee, Triton Environmental (Correspondence, September 8, 2011) Bill Rublee, Triton

	Rainbow Trout are potentially vulnerable			Environmental (Correspondence, November 30, 2011)
Roads and Transmission Lines	<ul style="list-style-type: none"> Impact on Bull trout due to bull trout sensitivities to water temperature changes Potential damage to plants 	<ul style="list-style-type: none"> Bull trout are food for SFN 	<ul style="list-style-type: none"> Food and culture loss Possible sedimentation of creeks Impact on plants and plant gathering activities 	<ul style="list-style-type: none"> Bill Rublee, Triton Environmental (Correspondence, April 23, 2012) Negotiating Strategy Worksheet
Simpw Territory; local and regional study areas (plants)	<ul style="list-style-type: none"> Disturbance due to construction and production 	<ul style="list-style-type: none"> Food and medicines 	<ul style="list-style-type: none"> Culture loss 	<ul style="list-style-type: none"> Negotiating Strategy Worksheet
Upper Harper Creek (bull trout, rainbow trout)	<ul style="list-style-type: none"> Reductions to water flows 	<ul style="list-style-type: none"> SFN fish in Harper Creek 	<ul style="list-style-type: none"> Food and culture loss 	<ul style="list-style-type: none"> Aquatic Environmental Baseline Report (KP, July 22, 2012) Bill Rublee, Triton Environmental (Correspondence, September 8, 2011) Bill Rublee, Triton Environmental (Correspondence, November 30, 2011) Bill Rublee, email correspondence with Charlene Higgins (YMI, March 14, 2012)

Development activities associated with the proposed Harper Creek project must not prevent the SFN from accessing their traditional lands for the purpose of practicing their traditional livelihood. The loss of SFN's ability to practice their traditional livelihood will compromise their health and well being, cultural practices, and trade networks and will ultimately prevent the transmission of traditional knowledge to the youth and to future generations of SFN peoples.

Some SFN members have already reported cases of animals being poisoned and killed by contaminated water and vegetation due to industrial development activities occurring within their traditional territory. As such, the health and well being of SFN people may become

compromised, and may result in a loss of important subsistence resources integral to the SFN traditional livelihood. This report describes a number of animal species that are vitally important to the SFN for food, materials, and trade. These animals, including caribou, moose, grizzly bear, marmot, and deer are all found within local study area. Of particular importance, several species of fish including trout, whitefish, populations of caribou and several fish species including sockeye, coho and kokanee salmon, trout, and whitefish are at an elevated risk of disturbance resulting from mining development activities. Populations of salmon, trout, and whitefish found within Harper Creek are at risk of being adversely affected as chemical pollutant discharge in the water coupled with diversion of water from the creek for mining activities will result in the degradation and ultimate reduction of fish habitat.

According to the SFN, several small herds of caribou are known to traverse a system of old trails carved throughout the SFN traditional territory. The SFN have come to know these trails, as caribou rarely alter their travel patterns. Loss of vegetative cover, damage to trail systems, and the creation of new travel corridors for machinery and vehicular traffic will disrupt caribou migration, increase competition for resources, and increase caribou predation. In turn, the SFN will lose an important food source, and material resource traditionally used for clothing, leather, and trade.

10.0 RECOMMENDATIONS

As a result of this research, the SFN research team recommend that should the project proceed:

- Confirm with YMI that the vegetation and wildlife studies commissioned by YMI are complete and comprehensive. If a mitigation plan is possible, then SFN and YMI should develop a mitigation plan to avoid impacting those plant and animal species that are of importance to SFN. Of particular significance are plants utilized for medicinal and spiritual purposes and animals utilized for food consumption (and associated proxy's including water);
- A fisheries strategy program be developed to address impact on fish bearing rivers or creeks that flow into or near the project footprint, particularly Harper Creek;
- YMI should educate themselves about SFN harvesting practices and avoid any environmental disturbance during SFN seasonal round activities. This can be done through the development of a handbook that can be distributed and presented to all groups and individuals working on the Harper Creek Mine, critical to this process is an implementation plan;
- Cairns (two sites) or cultural markers identified through this project and the Archaeological Impact Assessment (AIA) must be treated as extremely sensitive cultural areas. Although both this project and the AIA did not dismantle the rock structures, the SFN members and leadership clearly view these two structures as areas that likely contain remnants of their ancestors and/or structures created by their ancestors. The ceremonial protocols conducted at both sites are testimony to the SFN interpretation

and significance of these structures. During the course of this study, SFN members strongly suggested that the cultural integrity of these two sites should be maintained through project planning and protocols established between SFN and YMI;

- Transportation corridors are often used for hunting, gathering and trapping. These corridors should have a significant buffer around them to allow SFN members to continue to frequent areas for harvesting purposes. The size of these buffers should be cooperatively agreed upon by YMI and SFN harvesters;
- Caribou migrate through the local study area and SFN members have noted the significance of Caribou to the SFN culture. If a mitigation plan is possible, YMI and SFN should cooperatively develop a caribou mitigation plan to ensure that the herd is not impacted by development activities and/or predators accessing the area as a result of new access opportunities;
- SFN members expressed concerns about cumulative impacts in their territory. SFN should cooperatively develop a territorial ecological threshold program;
- Access to the local study area should be controlled;
- Understand the significance of any site that holds a place name. These place name areas are important to SFN people, and YMI should appreciate how development activities may or may not impact or remove these place names from both the landscape and the SFN knowledge base.

In addition to the above, SFN members recommend the following:

- The Project footprint is located within prime Mountain caribou habitat. The SFN are very concerned as to how the proposed development will impact the caribou migration routes, and food sources. This particular sub-species is the most endangered of all North American species
- Create a liaison position within the SFN community. This person should be entitled to an honoraria based on the time required to fulfill their role, and will be responsible for communicating any unforeseen disturbances to SFN traditional use sites. This in part places important responsibilities into the hands of SFN members as it relates to the protection and integrity of traditional use sites.
- Update the SFN people through the liaison regarding all construction plans prior to and during construction and more importantly reclamation;
- Through a cultural awareness program, ensure that workers are aware of the history of the SFN people in the proposed development areas and SFN interest in returning to these areas to hunt, fish, and gather food and medicinal plants.
- Update SFN people regarding plans to limit construction damage to local forests and to mitigate development damage.
- Create, at minimum, regular points along the proposed access roads where people and animals can cross the route. It is critical that foot trails continue to cross newly constructed and/or upgraded access roads.

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12.0 SPECIES AND PROXYS

The appendices that follow provide a brief overview of Simpcw traditional knowledge and practices related to food gathering. Of particular note are the tables of species correspondences which illustrate connections between fish, plants, animals and the uses Simpcw and other Secwepemc peoples made of them. It is designed to inform officials at Yellowhead Mining Inc. of the importance of fish, plants, and animals to Simpcw people and to assist in developing strategies for mitigating the impacts of development on Simpcw lands. It was the research teams understanding that Yellowhead Mining Inc, has conducted various plant, fish and animal baseline studies. The information that follows is meant to augment those baseline studies to ensure that the proposed mine does not adversely impact these species listed below.

In some places, Secwepemctsin words (Shuswap language) are included. The spellings for these words are taken from the general Secwepemc page on the FirstVoices.com (<http://www.firstvoices.com/en/Secwepemc>) website and from additional ethnographic and guidebook sources.

Three “correspondence charts” are appended in Appendices 1-3. The charts list the primary fish, plant, and animal species found in Simpcw territory and within broader Secwepemc territory. The charts then show related information including details about the relationships between wildlife species.

The columns in the chart are as follows:

- English Common Name: the name given the fish, animal, or plant in English everyday common talk.
- Scientific Name: the Latin name used in biology to identify species.
- Secwepemctsin Language Name: the name used in spoken Secwepemctsin.
- Correspondences: This column details the relationship between a particular species and other species the named species relies on for survival. The idea here is that different species are connected to each other and harm to one can cause harm to another.
- Purpose of Use: This column details Secwepemc uses of the species.
- Time of Year Harvested/Used: when the species is used or collected by Secwepemctsin-speaking peoples.
- Reference(s): where the information came from.

Together, these charts provide the basis for an archival and historical understanding of Simpcw connections to the land. All charts must be augmented with the voices of Simpcw elders and community members.

Notes:

Appendix 1: SFN TEK - Plants

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
Alfalfa	<i>Medicago sativa</i>	Stl'iyá7	Favoured food of horses; Lesser scaups nest in alfalfa meadows	Introduced species		Davis 2002: 24; Palmer(b) 1975: 79; Campbell Vol I 1990: 328
Alder, mountain	<i>Alnus incana</i> ssp <i>tenuifolia</i>	Kwekwł7álh p	Deer and hares sometimes eat parts of the stem; preferred beaver food; preferred moose forage	Medicine: Applications and washes for sores, cuts and pains; washes for sweathouses; Dye: red dye; dye for gambling sticks, quills, hair, feathers, straw, mixed with Saskatoons to dye buckskin; mixed with roasted iron pyrites for black dye; Symbolic: Beaver-man offers the cambium to Coyote		Palmer(b) 1975: 35, 40, 43, 59-60; Parish and Thomson 1994: 157-158; Dawson 1891: 23; BC Hydro 1982: 21; BC Hydro 1978: 18-26, 40-43; Teit 1909: 476, 618; USDA moose
Alumroot	<i>Heuchera</i> spp	Legmín		Medicine: use for swollen veins and sores such as		Palmer(b) 1975: 41, 68; Parish

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
				those from athlete's foot; tea can be drunk for diarrhea		1991: 266
Alyssum, hoary	<i>Berteroa incana</i>			Introduced species		Davis 2002: 25
Angelica (Indian celery)	<i>Angelica</i> spp	Kák'ma		Food: stems taste like celery; seasoning	Eaten in May; found on side-hills and dry places	Palmer(b) 1975: 37, 56, 78
Annual sow-thistle	<i>Sonchus oleraceus</i>			Introduced species		Davis 2002: 24
Arnica, broad-leaved	<i>Arnica</i> spp.	Sklaltn xkwetkwtút l'stns		Medicine: eye wash	Gathered in Fall around sandy, dry side-hills	Palmer(b) 1975: 40, 58
Asparagus, garden	<i>Asparagus officinalis</i>			Introduced species; Food	Late Spring	Parish 1991: 294

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
Aspen, trembling	<i>Populus tremuloides</i>	Melmeltetá tlhp	Mule and whitetail deer, moose and rodents browse on young trees, leaves buds and shoots; provides important habitat for a number of wildlife species; beaver feed on the bark and shoots and construct dams and lodges with trees; moose habitat; Bald eagles, woodpeckers, owls, flickers, chickadees, nuthatches, Wood ducks, Bufflehead, sapsuckers, hummingbirds and	Shelter: tent pole; Material: drying racks; whistles made from the branches; fishing weirs; Food: cambium sometimes eaten		Davis 2002: 26; Meuninck 2008: 81; Parish 1991: 29; Palmer(b)1975: 68, 79; BC Hydro 1976: 6-36; BC Hydro 1982: 21; BC Hydro 1978: 18-26, 40-43; Harcombe Vol 1 1988: 138, 142; Campbell Vol I 1990: 284, 354, 358 and Vol II: 18, 26, 32, 48, 90, 358, 360, 374, 388; Bouchard 1979: 132; Teit 1909: 515; Keisker 2000: 19, 20, 21, 22; USDA black bear,

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
			several species of hawks and other birds of prey nest in the trees or use dead or decaying trees; bats, squirrels, marten, voles, woodrats, ermine, weasel, mice and chipmunks use dead or decaying trees; Sharp-tailed grouse nest under sparse canopies of this tree; black bear food; elk forage			elk
Aster	<i>Aster spp</i>	Tkwukwixán (possibly only one)	Vole forage	Medicine: Roots of Showy aster soaked to wash sores, boils and infections; roots		Davis 2002: 25, 26; Parish 1991: 122; Palmer(b) 1975:

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/Used	Reference/s
		type of aster)		boiled and applied to painful areas		40, 59; Cowan 1946: 118
Avens, large-leaved	<i>Geum macrophyllum</i>					Davis 2002: 25
Avens, yellow	<i>Dryas drummondii</i>			Medicine: heart medicine		Parish 1991: 221
Awn, red-three	<i>Aristida</i>			Native species found at Salmon River IR 1		Davis 2002: 25
Ball-head waterleaf (possibly Bulb head water leaf)	<i>Hydrophyllum capitatum</i> Dougl. Ex Benth.			Food: roots eaten by the Southern Secwepemc	Late Spring; June	Davis 2002: 5; Turner 1997: 130; Dawson 1891: 20

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
Balsamroot (Arrow-leaved balsamroot; Sunflower)	<i>Balsamorhiza sagittata</i>	Ts'elkanúpiy a7 or Tsät-tsilk'	Leaves eaten by elk, mule deer, bighorn sheep and ground squirrels;	Food: former root staple of the Komkanetkwa area near Kamloops; important source of food; all parts can be eaten; young leaves can be eaten raw or steamed; stems eaten only by Southern Secwepemc; the leaves can be smoked; the taproots can be roasted or steamed, hung to dry and then soaked overnight; the dried seeds can be pounded into flour; Medicine: leaves used as a wash for sores or poison ivy	Obtained in the bottoms and foothills in late April or early May; the best time to pick leaves for medicine is in early July when in blossom	Peacock 1998: 1; Palmer(a) 1975: 210, 222 and (b): 40, 41, 59; Davis 2002: 4, 24; Meuninck 2008: 125; Dawson 1891: 20; Teit 1909: 514, 515
Baneberry	<i>Actaea rubra</i>					Mirau 2003: 7
Bedstraw	<i>Galium</i> spp					Davis 2002: 25, 26

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
Bergamot, wild	<i>Monarda fistulose</i> L.			Material: burned for a mosquito repellent		Turner 1997: 168
Bilberry, low (Dwarf Bilberry, Whortleberry)	<i>Vaccinium myrtillus</i> L.		Likely elk, mule and whitetail deer forage; caribou forage	Food: gathered in large quantities; berries eaten fresh or dried	Gathered from August to early Fall	Turner 1997: 119; Dawson 1891: 21; BC Hydro 1982: 21; Teit 1909: 515; USDA caribou, elk

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
Birch, paper (White birch; Canoe birch; Silver birch)	<i>Betula papyrifera</i>	Kwekwilhilh nllhp; Kwelhín	An important winter food for many forest animals, including mule and whitetail deer, caribou and moose, woodpeckers, sapsuckers, chickadees, nuthatches and kinglets; favourite food of snowshoe hare, porcupine and beaver; provides cavity nests for vireos, woodpeckers, sapsuckers, nuthatches, chickadees; Western tanagers	Material: utensils and dishes; basketry (including cooking, berry gathering and baby bath baskets); bark water containers; bark snow shovels; fishing weirs; bark baskets used as saddle bags; bark trays used by menstruating women; trays for holding fish; cups; when girls reached maturity they drank out of painted bark cups; berry mashers; bark canoes (possibly only small canoes); cradles; "conduit tube" for female babies while in cradles; snowshoe cross-sticks; root digging stick handles; leaves mixed with children's urine and clay for washing soda for		Machmer 1995: 5, 10; Palmer(b) 1975: 35, 36, 60; Parish 1991: 30; Parish and Thomson 1994: 162; Turner 1998: 44; BC Hydro 1976: 6-36; BC Hydro 1981: 21; BC Hydro 1978: 18-26, 40-43; Harcombe Vol 1 1988: 142; Campbell Vol II 1990: 26, 348; Shuswap a 1986: 2; Bouchard 1979: 89-92, 132, 146, 148; Teit 1909: 475, 477, 496, 500, 534, 532, 514,

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/Used	Reference/s
			<p>and hummingbirds feed on the sap in the summer; pure upland stands provide whitetail deer beds and mixed and pure upland stands used by black bears for scratching; crossbills and finches are found in birch stands; whitetailed deer and elk browse on young birch and Red squirrels use basal hollows as caches; secondary cavity nesters such as squirrels, small</p>	<p>soap; combs; Cosmetic: soap and shampoo (from leaves); Other: drums; playing cards; Commerce: baskets were a trade item; Supernatural: young slave girls escape their captors in a birch bark canoe in the story of "<i>The girl who was taken as a slave</i>"</p>		<p>512, 497, 500, 501; Keisker 2000: 20; USDA caribou; Boas 1891: 641-42</p>

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/Used	Reference/s
			owls, tree-nesting duks and tree-roosting bats use the cavities; mule deer food; Cooper's hawks and Mourning doves nest in the trees			
Bitter-root (Sand rose, Desert Rose, Rock Rose, Spatlum, Spitlum)	<i>Lewisia redivivia</i> Pursh, <i>Lewisia columbiana</i> (Howell ex Gray) Robins.,	Spítl'm		Generally confined to the southern portions of the South Interior; Food: one of the most common roots eaten; roots are peeled and de-hearted then baked, dried or boiled; usually mixed with Saskatoon	Early to late May, depending on the elevation, just before the plants flower	Palmer(a) 1975: 210, 222 and (b): 34, 65; Turner 1997: 137-138; Teit 1909: 514

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
	<i>Lewisia pygmaea</i> (Gray) Robins.			berries or other foods; can be baked in fruit cakes; Commerce: trade item (Southern Secwepemc traded it to Northern Secwepemc)		
Bladder campion	<i>Silene vulgaris</i>			Introduced species		Davis 2002: 24
Bladderpod, Columbia	<i>Lesquerella douglasii</i>	Spawt		Medicine: Applications and washes for sores, cuts and pains; promotes sweating in the sweathouse		Palmer(b) 1975: 40, 61, 79; Parish 1991: 238
Blueberry, dwarf	<i>Vaccinium Caespitosum</i>	Sewáya	Likely caribou, elk, mule and whitetail deer forage; likely and black bear grizzly food	Food		Palmer(b) 1975: 79; Parish 1991: 94; BC Hydro 1982: 21; USDA caribou, grizzly, black bear, elk

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Blueberry, oval-leaved (Oval-leaved bilberry, Mountain blueberry, High-bush blueberry)	<i>Vaccinium ovalifolium</i> Sm.	Sekw'á7s	Favoured by grizzly bears; bushes provide important habitat and food for bears, songbirds and raccoons; mule and whitetail deer forage; moose forage; likely black bear forage; beaver food; towhee feed on the berries; waxwings likely eat the berries; likely caribou and elk forage	Food: eaten by the Southern Secwepemc; sometimes cooked as picked to make them lighter for carrying home, then later re-cooked and dried	August	Palmer(a) 1975: 222; Davis 2002: 4; Mowat 2000: 8; Meuninck 2008: 111; Turner 1998: 121; BC Hydro 1982: 21; Cowan 1946: 108-109; BC Hydro 1978: 18-26, 40-43; Handbook No 42: 17, 57; USDA caribou; USDA grizzly, black bear, elk
Bluegrass, Kentucky	<i>Poa pratensis</i>		Moose, elk, mule deer mountain goat and bighorn sheep			Davis 2002: 25; USDA moose, big horn sheep, mountain goat,

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			forage			mule deer, elk
Bluegrass, sandberg	<i>Poa secunda</i>		Moose, elk, mule deer, mountain goat and bighorn sheep forage			Davis 2002: 26; USDA moose, bit horn sheep; mountain goat, mule deer, elk
Bluejoint	<i>Calamagrostis canadensis</i>					Davis 2002: 24
Bog-orchid, white (Rein orchid)	<i>Habenaria dilatata</i> or <i>Platanthera dilatata</i> (Pursh) Lindl. Ex Beck (Turner lists as <i>Platanthera</i>)			Material: poison extract sprinkled on grizzly and coyote baits		Parish 1991: 287; Palmer(b) 1975: 55; Turner 1998: 182

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Bracket fungus (Horse's hoof fungus, Tinder fungus)	<i>Fomes fomentarius</i>	Púxwstl'iya (from puxum: to blow with the mouth)		Medicine: fungus is burned on the skin over the source of pains; hand ache and headache cure		Palmer(b) 1975: 40, 41, 49
Brome	<i>Bromus</i> spp.		Moose, elk, mule deer and bighorn sheep forage			Davis 2002: 24, 25, 26; USDA moose, bighorn sheep, mule deer, elk
Brown-eye Susan (Blackeyed Susan)	<i>Gaillardia aristata</i> [<i>Rudbeckia hirta</i> L. ?]	Sklaltn xkwetkwtút l'stns		Cosmetic: used for dandruff shampoo; Medicine: eye wash		Davis 2002: 24; Parish 1991: 133; Palmer(b) 1975: 40, 59
Buckwheat	<i>Eriogonum</i> spp	Pagpagálhila	Elk forage			Davis 2002: 25, 26; Palmer(b) 1975: 79; USDA elk
Bugleweed	<i>Lycopus</i>			Food: tubers steamed in		Turner 1997: 131

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(Water horehound)	<i>uniflorus</i> Michx.			pits and eaten		
Burdock	<i>Arctium</i> spp	Tspek'maml hp		Noxious weed		Davis 2002: 24; Palmer(b) 1975: 58
Buttercup	<i>Ranunculus glaberrimus</i>	Semeltsekiy á7		Other: children were told their hands would rot if they touched this poisonous plant		Davis 2002: 5; Parish 1991: 5
Cactus, prickly-pear brittle	<i>Opuntia fragilis</i>	Sekí7 or Skw'al		Medicine: cough syrup; applications and washes for sores, cuts and pains; Food: can be dug out from under snow when emergency food is needed; may have been eaten wherever it grew	Spring or Mid-winter for emergency food	Parish 1991: 217; Palmer(b) 1975: 40, 60-61, 79; Turner 1997: 102; Teit 1909: 515
Camus, blue (Sweet camas, Edible)	<i>Camassia quamash</i> (Pursh)			Food: an important part of the diet where it grows in Secwepemc territory;		Turner 1997: 66-67; Dawson 1891: 20; Teit 1909: 514

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camus, Black camas)	Greene; (Dawson calls it <i>Camassia esculenta</i>)			Commerce: obtained from other First Nations in dried form		
Camas, death	<i>Zigadenus venenosus</i> Wats.	Yiwástn		Medicine: applications and washes for sores, cuts and pains; treatment for sore legs		Palmer(b) 1975: 40, 43, 55
Canby's lovage (Wild ginseng, Wild licorice, Indian Marijuana)	<i>Ligusticum canbyi</i> Coult. & Rose			Gathered around the tunnels near Revelstoke Dam; Other: root mixed with tobacco in a cigarette or pipe and smoked; chewing tobacco; Medicine: smoked as a relaxant		Turner 1997: 80-81
Cascara	<i>Rhamnus purshiana</i>	Lhánlhen		Medicine: bark is boiled (usually with soapberry twigs and sticks) and drunk		Palmer(b) 1975: 65; Turner 1997:

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				for a laxative		110
Catnip	<i>Nepeta cataria</i>					Davis 2002: 24
Cattail, common (Bulrush)	<i>Typha latifolia</i>	Stl'naltxw	Favoured food of deer; eaten by porcupine and muskrat; provides important habitat and food for many marsh animals, including muskrats, beaver, mink, vole, wrens, blackbirds, and waterfowl; food staple of the muskrat; grebe and Lesser scaup nesting material; Mute swans, Mallards,	Gathered by the Southern Secwepemc; Material: leaves used to make tule mats or baskets for drying berries; bulrushes strung on threads of nettles for mats; baskets for winter; mats for tents; bedding mats; saddle blankets; cotton used for pillows and mattresses; rafts		Palmer(a) 1975: 212 and (b): 34, 36, 55; Davis 2002: 5; Parish 1991: 359; BC Hydro 1976: 6-50; Harcombe Vol 1 1988: 88; Campbell Vol I 1990: 168-180, 261, 278, 292, 314, 320, 328 and Vol II: 22, 72, 86, 98, 100, 104; Teit 1909: 493, 532; USDA muskrat, mink, vole; Boas 1891:

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			Canvasbacks, Ringneck ducks; Canada geese nest in cattails; rails, coots and sora nest in shallow water; Northern harrier nest amongst cattails; Ring- necked pheasants and Ruffed grouse nest under clumps of cattail			636

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Cedar, western red	<i>Thuja plicata</i>	Astkw	Red squirrels eat the buds in spring, and cut and store seed-laden branches for winter forage; moose, rabbits and deer browse on the leaves; porcupine eat the bark; beaver food; black bear winter den in the hollow base; tips used by black bear for den bedding; red squirrels nest in cedar groves and use the bark for nesting material; mergansers nest in cavities; owls and	Material: roots used to sew birch bark baskets (including for decoration) and birch bark baby cradles; roots used for coiled baskets; bark used for bark lodges; rope; pit house covering; temporary home covering; female lodge flooring; canoes; canoe paddles; clothing; clothing stored in cedar root baskets; bark used as fire starter; Commerce: trade item; Supernatural: roots and tule used to make special head covers (thloo-wh-CANE-um) that "Indian" doctors wore when recovering someone's soul	Bark for pit houses peeled in the Spring	Mirau 2003: 7; Davis 2002: 5; Meuninck 2008: 131; Parish 1991: 48; Palmer 1975: 36, 50; Bouchard 1979: 281-282; Turner 1998: 44; Dawson 1891: 17; Cowan 1946: 108-109, 113; BC Hydro 1978: 18-26, 40-43; Campbell Vol I 1990: 360 and Vol II: 358, 360, 374, 388, 416; Shuswap b 1986: 1; Teit 1909: 487, 493; Bouchard 1979: 128, 144, 146; Keisker 2000: 23;

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			hummingbirds nest in the trees; black bears, owls, bats, squirrels, marten, fishers, assorted ducks, voles, woodrats, mice, chipmunk, ermine and weasels use the dead or decaying trees			Boas 1891: 636
Cheatgrass	<i>Bromus tectorum</i>			Introduced species		Davis 2002: 24
Cherry, pin and bitter (Bird cherry, Wild cherry, Wild red cherry)	<i>Prunus pensylvanica</i> L.f. (Pin); <i>Prunus emarginata</i> Dougl. Ex	Peklhnúsa7	Pin cherry is a favoured food of many birds; important forage for mule and whitetail deer;	Food: both varieties were probably eaten fresh on a casual basis, but the Secwepemc gathered large amounts of Pin cherries along the west shore of	mid-Summer	Palmer(a) 1975: 210, 222 and (b): 34, 67, 79; Parish 1991: 58; Parish and Thomson 1994: 146; Turner

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	Hook (bitter)		possible beaver food (or choke cherry); moose forage	Salmon Arm on Shuswap Lake; Material: hand grips of bows wrapped in this bark; bark dyed red and used to decorate cedar root baskets and cradles and birch bark baskets		1997: 146-147; BC Hydro 1982: 21; BC Hydro 1978: 18-26; Teit in Palmer(b) 1975: 67; Bouchard 1979: 148; Teit 1909: 476, 480; USDA moose
Cherry, choke	<i>Prunus virginiana</i> L.	Tkwlósa7	Black bear feed intensively on this berry; an important food for birds, raccoons, skunks, porcupines and whitetail and mule deer; possible beaver food (or pin cherry); moose and mountain goat forage; waxwings	Food: one of the three highest yielding berries for the Southern Secwepemc; eaten fresh and dried for winter; roots "make good beer"; berries used for wine; Medicine: juice taken to promote strength after sickness; pregnant women avoided eating the berry "for the welfare of the child"; Food:	mid-August to September	Palmer(a) 1975: 222 and (b): 67; Davis 2002: 4, 12, 24; Meuninck 2008: 76; Parish 1991: 58; Turner 1997: 148; BC Hydro 1982: 21; BC Hydro 1978: 18-26, 40-43; Handbook No 22: 57; Teit 1909: 515; USDA

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
			eat the berries	both varieties were probably eaten fresh on a casual basis, but the Secwepemc gathered large amounts of Pin cherries along the west shore of Salmon Arm on Shuswap Lake; Material: hand grips of bows wrapped in this bark; bark dyed red and used to decorate cedar root baskets , cradles and birch bark baskets; Material: berries mixed with bear grease to make pictograph paint		moose, mountain goat
Chickweed, garden	<i>Stellaria media</i>		Favoured food of song sparrows	Introduced species		Davis 2002: 25; Handbook No 42: 22

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Chicory	<i>Cichorium intybus</i>			Introduced species		Davis 2002: 24
Cinquefoil, sulphur (Common Silverweed, Cinquefoil, Indian sweet potato, Silverleaf?)	<i>Potentilla recta</i> and/or <i>Potentilla anserina</i> L. (Turner lists Silverweed/ Cinquefoil as <i>Potentilla anserina</i> L.)	X̄l̄xel; Put-h̄il-i-h̄il	Black-capped chickadees forage on seed heads during the winter; grizzly bear food; big horn sheep forage	Food: root eaten raw, steamed or roasted; large quantities gathered for food; Supernatural: root is part of the <i>Story of Xonisse'sest</i>	August to October	Palmer(a) 1975: 212, 222 and (b): 34, 66-67, 78; Davis 2002: 12, 26; Turner 1997: 145; Dawson 1891: 20; Dawson in Palmer(b) 1975: 66; Teit in Palmer(b) 1975: 66-67; Teit 1909: 514; USDA big horn sheep
Cladonia	<i>Cladonia</i> spp.					Davis 2002: 24
Cladonia, black-foot	<i>Cladonia gracilis</i>		Caribou forage			Davis: 24; USDA caribou

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Clematis, white	<i>Clematis ligusticifolia</i>	Stl'eptl'úpel ekw		Medicine: mixed with tarragon to make a poultic for bruises, sprains and broken bones		Parish 1991: 210; Palmer(b) 1975: 61
Clover	<i>Trifolium spp</i>	Stl'iyá7	Red clover is an important forage for game; snowshoe rabbit food; marmot and muskrat food; elk, mule deer and big horn sheep forage; grizzly food	Introduced species		Davis: 24, 25, 26; Meuninck 2008: 25; Cowan 1946: 119-120; Harcombe Vol 1 1988: 54, 138; USDA grizzly, big horn sheep, muskrat, elk
Comandra, pale	<i>Comandra umbellata</i>					David pg 25

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Cottonwood, black and Balsm poplar (Poplar, Northern black cottonwood, White poplar, possibly Black birch bark)	<i>Populus balsamifera</i> ssp. <i>Trichocarpa</i> (Black cottonwood); <i>Populus balsamifera</i> ssp. <i>Balsamifera</i> (Balsam poplar)	Mulux	Deer, moose and rodents browse on young trees, leaf buds and shoots; an important stabilizer of riverbanks; enhances fish habitat by providing shade and keeping water temperatures low; decaying leaves provide food for insects that salmon and trout feed on; beaver eat the inner bark and use the stems to construct dams; woodpeckers, Bufflehead, mergansers, Wood	Medicine: may have been used for eczema; medicinal tea; resin on buds used as ointment for small cuts; applications and washes for sores, cuts and pains; Supernatural; Material: seed fluff used as stuffing for pillows; resin on buds used as glue, including glue for attaching feathers to arrow shafts; tanning; utensils; bark lodges; fishing weir; temporary baskets; large trees used for dugout canoes; rotten wood burned for smoking buckskin; Other: soap; Food: buds eaten, buds fried and eaten; cambium		Davis 2002: 5; Palmer(b) 1975: 36, 40, 68 79; Meuninck 2008: 81; Parish 1991: 28; Parish and Thomson 1994: 169; Turner 1997: 156-157; Dawson 1891: 14, 22; BC Hydro 1978: 18-26, 40-43; Harcombe Vol 1 1988: 142; Campbell Vol I 1990: 238, 284, 350, 354, 358, 360; and Vol II: 10, 18, 26, 28, 32, 36, 48, 348, 358, 360, 374, 388; Teit in Palmer(b) 1975:

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			ducks, goldeneyes, Great Blue Heron, Osprey, Bald eagles, Mourning doves, owls, woodpeckers, hummingbirds, sapsuckers, flickers, several species of hawks and other birds of prey nest in the trees or use decaying or dead trees; preferred food of beavers; black bears, bats, squirrels, marten, voles, woodrats, mice, chipmunk, ermine, fishers and weasels use dead or decaying trees;	sometimes eaten		68; Teit 1909: 489, 493, 519; Bouchard 1979: 132; Teit 1909: 515; Keisker 2000: 19, 20, 22, 23; USDA black bear, vole; Boas 1891: 636

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			black bear food; vole dens			
Cow parsnip (Indian celery, Wild rhubarb)	<i>Heracleum lanatum</i>	Xwtalhp; HOH-tulp	Grizzly bear food; elk forage	Food: large leaf-stalks and stems eaten in the spring; a common root food (eaten steamed); Material: elk and moose calls; cover for berry baskets; whistles; Other: flute; Medicine: tea tonic	March-April	Mirau 2003: 7; Davis 2002: 5; Palmer (b) 1975: 36, 40, 56, 78; Dawson 1891: 22; Teit 1909: 514,515, 530; USDA grizzly, elk

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Currant, northern black (wild black currant)	<i>Ribes hudsonianum</i> Richards.	Twupupúps a7	Favoured food of bears; moose forage; possible whitetail deer and elk forage; possible vole food	Food: eaten by the Southern Secwepemc; considered tasteless but eaten "years ago," possibly as a last resort		Parish 1991: 52; Palmer(b) 1975: 63, 80; Turner 1997: 126; Teit 1909: 515; USDA moose, whitetail deer, elk
Currant, wild (Waxy currant; Squaw currant) [possibly also red currant]	<i>Ribes cereum</i>	Stxwelxwúx wel	Important food source for early hummingbirds; moose forage; grizzly food; possible whitetail deer and elk forage; possible vole food	Red currants (possibly wild currants) are gathered northeast of the cemetery at IR 1; Grows well on dry slopes of lower and hotter valleys; Food: eaten fresh; Medicine: tonic; eaten to relieve diarrhea	Ripen in June or July	Parish 1991: 53; Palmer(b) 1975: 63, 79; Turner 1998: 125; Dawson 1891: 21; Teit 1909: 515; USDA moose, grizzly, whitetail deer, vole, elk
Dandelion, common	<i>Taraxacum officinale</i>		Goldfinches eat the seeds, marmot food; mule deer	Introduced species		Davis: 24; Meuninck 2008: pg 8; Harcombe Vol 1

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			forage			1988: 54; USDA mule deer
Desert-parsley (Wild carrot, Indian carrot, Indian sweet potato, Hog-fennel, Biscuit root), Biscuit Root (Desert Parsley, Hog-fennel, Cous, Camas), Chocolate Tips (Wild celery, Bitter root); Indian celery (Wild	<i>Lomatium</i> spp.	L. dissectum is Gayú7 (root) or Sewáya; Gayak̓in (head); <i>L. macrocarpum</i> is Kw'ekw'ila	Grizzly bear food	Food: the Southern Secwepemc ate the soft inner part of the older shoots of Chocolate tips; ate the younger shoots and roots of Desert parsley; former root staple of the Komkanetkwa area near Kamloops; Indian celery used as a green food and flavour enhancer for roots and soups; Supernatural: Biscuit root is a man who introduced the female role of root digging in the Story of <i>Kwil-i-elt</i> ; Medicine: <i>L. dissectum</i> used for applications and washes for	Obtained in the bottoms and foothills in the Spring; chocolate tip shoots harvested in April and the roots dug up in May; Indian celery gathered from April to June	Palmer(a) 1975: 222 and (b: 40, 56-57, 66, 79; Peacock 1998: 1; Davis pg 24; Parish 1991: 248; Turner 1997: 81-82, 84; Turner 1998: 83-84; Turner 1997: 81-87; Teit 1909: 514

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celery, Indian consumption plant, Bare-stem Lomatium, Desert Parsley); Narrow-leaved desert parsley, Sevale desert parsley				cuts, sores and pains		
Devil's club	<i>Oploplanax horridum</i>	Xwuxwalekw	Beaver food; grizzly bear food	Medicine: decoction used by women after childbirth (or used by some women in place of mountain juniper after childbirth)		Palmer(b) 1975: 58; BC Hydro 1978: 18-26; Harcombe Vol 1 1988: 108; Teit 1909: 618

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Dogbane, Spreading (Indian hemp)	<i>Apocynum cannabinum</i>	Spats'n (Rope)		Material: Netting for snowshoes; rope; thread and twine; sewing material for single-layer mats; blue grouse snares; fire tinder; string for sandals; considered "best" for making nets and fish-lines	Fall	Palmer(b) 1975: 36, 57-58, 78; Bouchard 1979: 143; Teit 1909: 477, 501, 507, 491
Dogwood, red osier	<i>Cornus stolonifera</i> L.	Tsexwtsúxw or Tsexts'xwál hp	"Extremely" important moose winter browse; beaver food; caribou, whitetail and mule deer forage; waxwings eat the berries; Mourning doves nest in the trees; grizzly food	Material: skewer sticks; sweathouses made of bent branches; Food: berries eaten; pure white berries often preferred over berries tinged with blue; Other: mixed with tobacco and smoked	August to October	Palmer(a)1975: 212 and (b): 34, 36, 37, 61; 80; Davis 2002: 25; Parish 1991: 80; Turner 1997: 107; Dawson 1891: 23; BC Hydro 1978: 18-24, 40-43; Harcombe Vol 1 1988: 138, 142; Handbook No 22: 57; Campbell Vol II

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						1990: 348; USDA caribou, grizzly, whitetail deer
Douglas Fir, interior	<i>Pseudotsuga menziesii</i>	Tsk'alhp; Stkamálhk (the sweet sugar-like substance that crystalizes on the tree)	Provides winter habitat for mule deer; possible blue grouse habitat; mule and whitetail deer forage; many animals eat the seeds, including squirrels, chipmunks, mice, shrews, winter wrens and crossbills; bears often scrape off the bark on young trees and eat the sap	Food: berries eaten, preferably when mixed with Saskatoon berries; tea made from young twigs and needles (may have been drunk during sweatbaths); nuts eaten; "sugar" formed on leaves and branches eaten; seeds, or nutlets, occasionally eaten, particularly if found in rodent caches; Material: possibly wooden wedges; flooring; possibly coyote, wolf and fox snares made by bending over the top of		Mirau 2003: 7; Peacock 1998: 1; Palmer(a) 1975: 235 and (b): 36, 37, 43, 48, 50, 52-53, 80; Davis 2002: 24; Poole 2000: 18; Poole 2001: iii; Mowat 2000: 7; Parish 1991: 47; Parish and Thomson 1994: 98; Bouchard 2000: 281; Turner 1997: 57; BC Hydro 1982: 21; BC Hydro 1978:

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			layer beneath; moose forage; Goldeneyes, mergansers and Buffleheads nest in cavities; hummingbirds, Bald and Golden eagles, owls, gulls, flickers and several species of hawks and other birds of prey nest in the trees; Sharp-tailed grouse nest under sparse canopies of this tree; black bears, bats, squirrels, marten, voles, woodrats, mice, chipmunks, fishers,	the young trees; salmon smoking; salmon skewers for drying and barbecuing; Medicine: good for the kidneys and bet-wetting in children; decoction drunk in sweathouses for purification; Supernatural: counteracts the dangers of life changes and unusual events; the branches, decoctions and needles were used in rites of passage; The Secwepemc culture giver Old One instructed the fir to help people when they washed with his branches; Coyote transforms a piece of the wood into a gun in the story of <i>Coyote and His Niece</i> ;		40-43; Harcombe Vol 1 1988: 62, 138, Campbell Vol 1 1990: 350, 354, 358, 360 and Vol II: 18, 22, 26, 32, 36, 44, 48, 90, 238, 358, 360, 374, 388, 414, 416, 446; Bouchard 1979: 142-143; Teit 1909: 618; Keisker 2000: 20 22, 23

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			ermine and weasels use dead or decaying trees	Other: tobacco		
Duckweed	<i>Lemna minor</i>		Important food and habitat for waterfowl; habitat for mollusks, insect larvae, tadpoles and frogs; helps cleanse nutrient-rich ponds			Davis 2002: 24; Meuninck 2008: 92; BC Hydro 1976: 6-50

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Elderberry, blue	<i>Sambucus cerulea</i> Raf.		Beaver food; moose and whitetail deer forage; grizzly bear food; Mourning doves nest in the bushes	Food: berries eaten fresh and dried; Other: children's "popgun"	Late Summer	Parish 1991: 81; Palmer(b) 1975: 37; Turner 1997: 103; BC Hydro 1978: 18-26, 40-43; Harcombe Vol 1 1988: 108; Campbell Vol II 1990: 348; USDA whitetail deer
Fairy bells, hooker's and Fairy bells, rough-fruited (Fairy lilly)	<i>Disporum hookeria</i> (Torrey) Nichols., (Hooker's) <i>Disporum trachycarpum</i> (Wats) B. & H. (Rough-	S7aytskw̓m úml̓exw	A favoured food of grizzly bears	Food: roots eaten raw by some Secwepemc people		Palmer(b) 1975: 37,80; Parish 1991: 301; Turner 1997: 166

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	fruited)					
False solomon's seal	<i>Smilacanina racemosa</i>	K'ixán (Snake root)	Beaver food	Food: berries, young greens and fleshy rhizomes eaten; Medicine: tea tonic; Material: hung in sweathouses to remove odours		Mirau 2003: 7; Davis 2002: 24; Parish 1991: 299; Palmer(b) 1975: 40, 43, 55; BC Hydro 1978: 18-26
Fern, bracken	<i>Pteridium aquilinum</i>		Northern shovelers line their nests with this and other ferns	Material: cover for berry baskets (other ferns probably used for same purpose); bedding for camping		Parish 1991: 362; Palmer(b) 1975: 36; Campbell Vol I 1990: 302
Fern, fragile	<i>Cystopteris fragilis</i>					Davis 2002: 24
Fern, lady	<i>Athyrium filix-femina</i>	Supúlexw	Beaver food			Mirau 2003: 7; Palmer(b) 1975: 79; BC Hydro 1978:

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						18-26
Fern (unidentified)	<i>Asplenium felix-femina</i> or <i>Aspidium munitum</i>			Material: black dye obtained from the roots		Dawson 1891: 23
Fescue	<i>Festuca</i> spp		Big horn sheep and mountain goat forage			Davis 2002: 26; USDA big horn sheep; mountain goat
Fir, subalpine (Balsam, White balsam, Alpine fir, Rocky Mountain fir)	<i>Abies lasiocarpa</i>	Tsk'ekák'lh (called the "Medicine tree")	Caribou eat the lichen found on the lower branches; caribou eat the young branches and bark; squirrels eat the seeds of the cones; moose and caribou habitat; black bear forage	Ceremonial: Needles used; Medicine: pitch extracted from the blisters used for boils, sores and tuberculosis; heated pitch poultice used for pains; tea used for coughs; Material: snowshoe frames; wooden wedges; ground sticks; flooring; temporary home		Mirau 2003: 7; Davis 2002: 5; Parish 1991: 39; Parish and Thomson 1994: 86; Palmer(b) 1975: 36, 37, 40, 41, 50-51, 80; Turner 1998: 82; Dawson 1891: 13, 22; BC

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			on needles; pika food; moose forage; hummingbirds nest in firs; woodpeckers use the dead or decaying trees	covering; temporary baskets; baskets for cooking berries and soaking skins; bedding; butchering surface; brush used for girl's lodges; brush used to soften back packs and to carry large fish (fish are rolled up in it); Food: cambium and nuts eaten; Supernatural: needles possibly burned on wrists and forearms of "girls in training;" small branches broken and scattered by young women at the age of maturity as they "wander forth alone after dark" [may have been referring to Douglas fir]		Hydro date u/k: 6-26; Cowan1946: 108-109, 113, 119, 120; BC Hydro 1978: 18-26; Harcombe Vol 1 1988: 142; Campbell Vol II 1990: 414; Shuswap b 1986: 1; Teit 1909: 495, 532, 533, 534; Keisker 2000: 19

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Fireweed	<i>Epilobium angustifolium</i> L.; <i>Epilobium spicalum</i> (Dawson)	Ts'ixnálhp; Tse-ha-nulp'; tsē-ha-nulp'	Vole habitat, nesting site and nesting material; beaver food; mule deer and moose forage	Food: inner part of the young stem eaten		Palmer(b) 1975: 37, 64, 80; Turner 1997: 133; Dawson 1891: 22; Cowan 1946: 115; BC Hydro 1978: 18-24; Harcombe Vol 1 1988: 138; USDA moose
Fixweed	<i>Descurainia sophia</i>			Introduced species		Davis 2002: 24
Fleabane, triple-nerved	<i>Erigeron subtrinervis</i>					Davis 2002: 26
Fringed grass of Parnassus	<i>Parnassia fimbriata</i>			Supernatural: rubbed on the body for luck in hunting		Teit 1909: 619
Geranium, bicknell's	<i>Geranium</i> spp					Davis 2002: 24, 26

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Ginger, wild	<i>Asarum caudatum</i>			Medicine: cold and flu remedy		Parish 1991: 215
Goldenrod, Canada	<i>Solidago canadensis</i>		Bees and insects feed on nectar and pollen; small insects eat the leaves and stems; bigger insects and birds of prey feed on the smaller insects attracted to this plant; flies lay eggs in the stems and leaves	Medicine: mixed with sage for baths during childbirth; Cosmetic: used for baths		Davis 2002: 24; Meuninck 2008: 12; Palmer(b) 1975: 40, 59
Gooseberry, swamp (Swamp currant, Skunk)	<i>Ribes lacustre</i> (Pers.) Poir. Possibly also <i>Ribes</i>	Lhgasálhp (currant); Sxixwuxwut (possibly gooseberry)	Beaver food; mountain goat food	Food: Gathered by the Southern Secwepemc; considered tasteless compared to red currants; Medicine: good for "health		Palmer(a) 1975: 212 and (b): 34, 37, 63; 79l Parish 1991: 51-52; Davis 2002: 4; Turner

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currant, Prickly currant)	<i>glandulosum</i> <i>Ribes irrigutum</i>			and strength"; Material: combs		1998: 173; Turner 1997: 129; BC Hydro 1978: 18-26; Teit 1909: 512; USDA mountain goat
Grouseberry (Red alpine huckleberry, Dwarf red whortleberry, Dwarf red huckleberry, Small-leaved huckleberry)	<i>Vaccinium scoparium</i> Leiberg ex Coville		Grouse eat all parts of the plant; likely elk, mule and whitetail deer forage	Food: berries eaten, usually fresh; gathered with combs of wood or bone due to their small size	Gathered in Late Summer, at the same time as Dwarf blueberries	Parish 1991: 94; Turner 1997: 123; BC Hydro 1982: 21; USDA elk
Hawkweed	<i>Hieracium</i> spp.			Other: leaves chewed (to extract the gum) for pleasure		Davis 2002: 26; Turner 1997: 97

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Hawthorn, black and Hawthorn, red	<i>Crataegus douglassii</i> lindl. (black); <i>Crataegus columbiana</i> Howell (red)	Stmkwalhp or Yiníxw	Valuable wildlife food; a favoured food of squirrels and game birds; the fruit provides winter food for birds; the thickets are good nesting and denning or resting and sleeping sites for small birds and mammals; beaver food; moose and whitetail deer forage; Mourning doves nest in Hawthorn; grizzly food	Food: fruits of both species eaten, though are apparently better as jam because of its seeds; black hawthorn "bread" made with mashed and dried berries, then boiled with deer fat and bone marrow to make soup; Spiritual: widows or widowers use the bushes for pillows and beds to keep ghosts away		Davis 2002: 24; Palmer(a) 1975: 222 and (b): 79, 80; Meuninck, Parish and Thomson: 126; Turner 1997: 142-143; Boas in Palmer(b) 1975: 66; BC Hydro 1978: 18-26, 40-43; Campbell Vol II 1990: 348; Teit 1909: 512; USDA grizzly, whitetail deer
Hazelnut (Filbert,	<i>Corylus cornuta</i>	Xwálhp or	Nuts eaten by bears and squirrels;	Food: nuts eaten; Commerce: trade item;	October	Turner 1997: 100; Turner 1998: 157;

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Cobnut)	Marsh.	Kap'xwálhp	important forage for mule and whitetail deer; beaver food; one of the most important moose foods	Material: mats for cleaning salmon, sitting and sleeping; fishhook; suckers used to line birch baskets and cradles		Palmer(b) 1975: 37, 60, 79; BC Hydro 1982: 21; BC Hydro 1978: 18-26, 40-43; Teit 1909: 515
Hellebore, white	<i>Veratrum viride</i>			Material: poison		Teit 1909: 619
Hemlock, water	<i>Cicuta douglasii</i> (DC) Coult. Et Rose	Yiníxw		Poisonous plant		Palmer(b) 1975: 56
Hemlock, western	<i>Tsuga heterophylla</i>		Provides winter habitat for mule deer; Excellent food source for deer, elk and moose; nesting site for Bald eagles, owls, hummingbirds	Material: female lodge flooring		Mirau 2003: 7; Poole 2000: 18; Poole 2001: iii; Parish and Thomson 1994: 90; Bouchard 1979: 281; BC Hydro date

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			and Bonaparte's gulls; beaver food; caribou forage			u/k: 18-26, 40-43; Campbell Vol II 1990: 238, 358, 360, 374, 388, 416; USDA caribou
Holboell's rockcress	<i>Arabis holboellii</i> and <i>Arabis drummondii</i>			Medicine: <i>drummondii</i> decoction drunk as a diuretic		Davis 2002: 25; Teit 1909: 618
Honeysuckle	<i>Lonicera ciliosa</i> (Pursh.)	Stl'eptl'úpel ekw	Varied thrush eat the seeds; grizzly food; whitetail deer food			Palmer(a) 1975: 212 and (b): 34, 61; Handbook No 22: 23; USDA grizzly, whitetail deer
Horsetail, common	<i>Equisetum arvense</i>	Xwixwiyúyst n (stem)	Important forage and habitat for waterfowl; grizzly and black bear food; grebe nesting	Material: used like sandpaper to smooth and polish surfaces		Mirau 2003: 7; Davis 2002: 25; Parish 1991: 371; Palmer(b) 1975: 49; BC Hydro 1976:

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			material; teal and Black terns nest in horsetail			6-50; Harcombe Vol 1 1988: 108; Campbell Vol I 1990: 168, 300 and Vol II: 290; USDA grizzly, black bear
Horseweed	<i>Conyza canadensis</i>					Davis 2002: 25
Hound's-tongue	<i>Cynoglossum officinale</i>			Noxious weed		Davis 2002: 25
Hucklebery, dwarf	<i>Vaccinium caespitosum</i> Michx.	Sesáp	Likely mule and whitetail deer forage (they feed on at least one huckleberry species); moose forage; probable grizzly and black bear food;	Food: "very nice" berry for eating	Ripens in August in higher areas; gathered from August to October	Palmer(a) 1975: 222 and (b): 63, 78; Davis 2002: 4; BC Hydro 1982: 21; Harcombe Vol 1 1988: 138; USDA moose; USDA grizzly, black bear;

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			mountain goat forage			mountain goat
Huckleberry, black (Mountain bilberry, Black mountain huckleberry) and Huckleberry, Red	Black is <i>Vaccinium membranaceum</i> ; Red is <i>Vaccinium parvifolium</i>	Tsekwlúsa7 (<i>parvifolium</i>); Wenexálhp (<i>membranceum</i>)	Favoured food of grizzly bears; black bear food; coyote food; possible moose, mule and whitetail deer forage	Food	July or August; Late Summer or early Fall; Ripen in August in higher areas	Palmer(a) 1975: 222 and (b): 63, 80; Davis 2002: 4; Mowat 2000: 8; Davis 2002: 4; Bouchard 1979: 280; Cowan 1946: 110; Harcombe Vol 1 1988: 108; USDA moose, black bear, grizzly, whitetail deer, mule deer
Ivy, poison	<i>Rhus radicans</i> L. or <i>Toxicodendron radicans</i>	Lhek-mámlhp		Medicine: Remedy for contact with poison ivy includes bathing the injured skin with Balsamroot, inhaling the steam from		Palmer(b) 1975: 56; Turner 1997: 182-183

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	(L.) [Turner lists as <i>T. radicans</i>]			boiled Balsamroot or drinking large quantities of Labrador tea		
Juniper, common and Juniper, rocky mountain (Mountain juniper)	<i>Common is Juniperus communis L.</i> and Rocky Mountain is <i>Juniperus scopulorum</i>	Pepúpanlhp or Punlhp (Rocky Mountain); Tsitsexts'áxt or Xkw'uwáws a (Common); Poontlp	whitetail and mule deer forage; Varied thrush eat the seeds	Food: tea; Ceremonial: needles used; Material: combs; bows; Medicine: headache, smallpox and ear ache cure; dilutions poured on hot rocks in the sweathouse to inhale for respiratory ailments; decoction drunk by women after childbirth; decoction used for sore eyes; hunters mix Rocky Mountain juniper and sagebrush together as an eyewash to keep them "clear-sighted"		Palmer(a) 1975: 212 and (b): 34, 36, 41, 43, 80; Davis 2002: 5, 25; Parish and Thomson 1994: 25; Dawson 1891: 17; BC Hydro 1982: 21; Handbook No 22: 23; Teit 1909: 512, 519; Teit 1909: 618

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Kinnikinnick (Bearberry)	<i>Arctostaphylos uva-ursi</i> (L.) Spreng.	Alkálhp	Vole food; grizzly bear food; mountain goat and whitetail deer forage	Food: berries eaten raw or cooked, with other foods; boiled in soup; fried in salmon oil or bear fat; weak tea drunk as a beverage; Medicine: strong tea drunk as a diuretic; Supernatural: Coyote tries to replace his lost eyes with the berries in <i>The Eye Juggler</i> ; kinnikinnick leaves and red willow saplings are smoked in the story of <i>Thlee-sa Travels the Land</i> Other: roasted and mixed with tobacco	Late Summer up to Winter; Can be dug out from under snow	Mirau 2003: 7; Palmer(b) 1975: 41, 62, 79; Turner 1997: 111; Dawson 1891: 23; Harcombe Vol 1 1988: 80, 108; Teit 1909: 515, 618; Bouchard 1979: 3; USDA mountain goat, whitetail deer
Knapweed	<i>Centaurea</i> spp		Black-capped chickadees forage on seed heads during the winter	Noxious weed found at Salmon River IR 1		Davis 2002: 12, 24, 26

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Labrador Tea, Trapper's Tea (Swamp tea, Hudson's Bay tea, Muskeg Tea, Indian tea)	<i>Ledum groenlandicum</i> Oeder (Labrador); <i>Ledum glandulosum</i> Nutt. (Trapper's)	Secwsqe'qx e'ten ("bathing-dog-stuff") or Sexskákxatn	Lesser scaups nest amongst Labrador tea; Sandhill cranes nest among thick patches	Gathered by the Southern Sewepemc; Food: tea, often mixed with black tea or mint; Medicine: tea used for indigestion, heart medicine, childbirth, blindness, eye wash and Poison ivy wash; also drunk for Poison ivy; Other: dog tonic, bath and purification	Fall	Palmer(a) 1975: 212 and (b): 34, 40, 62, 78; Parish 1991: 86; Turner 1997: 115; Campbell Vol I 1990: 328 and Vol II: 108; Teit 1909: 515, 618
Lamb's quarter (Pigweed)	<i>Chenopodium album</i> L.			Food: greens are boiled		Palmer(b) 1975: 61; Turner 1997: 173
Ladyslipper, mountain	<i>Cypripedium montanum</i>	"Buck plant" [potentially]				Parish 1991: 284

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Lichen, black tree (Black tree moss, Edible lichen, Indian bread)	<i>Bryoria fremontii</i> Tuck. (often referred to as <i>Alectoria jubata</i> in historical sources)	Wíla or Wí-luh (Indian Bread);	Eaten by deer in the winter; main winter food of caribou (along with <i>Alectoria sarmentosa</i>)	The Secwepemc preferred to gather it from lodgepole and ponderosa pine; Food: "Indian Bread"; can be eaten raw in times of emergency but was usually roasted; was sometimes cooked with bulbs; Supernatural: Coyote's fur was transformed into black tree moss to provide food for the coming people in the story of <i>Coyote and Spider</i>	April, June or anytime of the year according to preference	Palmer(b) 1975: 38, 47-48, 80; Bouchard 1979: 280; Armleder: 2; Turner 1997: 33-35; Dawson 1891: 20-21; 22-23; Teit 1909: 515; Bouchard 1979: 22; USDA caribou
Lichen, dog pelt	<i>Peltigera rufescens</i> [Parish classifies dog pelt lichen as <i>P.</i>		Moose forage on <i>Peltigera</i> spp.; caribou forage on <i>Peltigera canina</i>			Davis 2002: 24; Parish 1991: 418; USDA moose, caribou

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	<i>canina]</i>					
Lichen, leaf	<i>Cetraria</i> spp	K'áma páka (dry needles mould)		Material: dye		Palmer(b) 1975: 48
Lichen, pixie-cup	<i>Cladonia pyxidata</i>		Caribou forage			Davis 2002: 25; USDA caribou
Lichen, wolf and Lichen, yellow	<i>Letharia vulpina</i> (L.); (often referred to as <i>Evernia vulpina</i> in historical sources)	Tkwelmáka 7 (green limb); Ta-kwul-a-muk'-oo		Material: dye; dye for painting the face and skin		Palmer(b) 1975: 48, 59; Dawson in Palmer(b) 1975: 48; Dawson 1891: 23; Teit 1909: 475-476
Lily, chocolate	<i>Fritillaria lanceolata</i>			Food: One of the most common roots eaten; roots are steamed or boiled like potatoes, or pit-cooked;	May to August after they have flowered	Davis 2002: 5; Parish 1991: 297; Turner 1997: 71;

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				stem also eaten		Teit 1909: 514
Lily, mariposa (Wild potato, Desert lily. Segó lily, Lavender lily, Sagebrush Mariposa, Wild gladiola, Sweet onion)	<i>Calochortus macrocarpus</i> Dougl.	Lílts'a	Mule deer forage	Food: former root staple of the Komkanetkwa area near Kamloops; roots eaten by Southern Secwepemc	Obtained in the bottoms and foothills in the Spring	Peacock 1998: 1; Palmer(a) 1975: 210, 222; Palmer(b) 1975: 54; Teit 1909: 514; USDA mule deer
Lily, tiger and Lily, wood [may be misreferenced in literature]	<i>Lilium columbianum</i> Hanson and possibly <i>Lilium philadelphicum</i>	Textsín (Wood lily); Tāh-tshin'		Food: roots and bulbs eaten; this root was commonly baked at "root-baking places;" may have been one of the most important food roots and people camped where it grew to harvest it; Medicine: health tonic in	Harvested in late Summer and Fall, as late as November	Davis 2002: 4; Palmer(a) 1975: 222 and (b): 54-55; Bouchard 1979: 280; Turner 1997: 74; Dawson 1891: 9, 19; Teit 1909: 514

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				small doses		
Lily, yellow avalanche (Dog-tooth violet, Glacier Lily, Yellow Dog-tooth Violet, Snow Lily, Indian sweet potato, Indian potato)	<i>Erythronium grandiflorum</i> Pursh	Sxwixw	Grizzly bear food; vole food	Food: bulbs eaten steamed, roasted or boiled; bulbs dried in strings for winter use; one of the most important root foods of the Secwepemc	Dug up in April and May when first budding at lower elevations and in the Summer at higher elevations	Palmer(a) 1975: 210, 222 and (b): 34, 54; Dawson 1891: 20; Cowan 1946: 118; Harcombe Vol 1 1988: 108; Teit 1909: 514
Lily, yellowbell (yellow snowdrop)	<i>Fritillaria pudica</i> (Pursh) Spreng.	Ts'gwáwya		Food: bulb eaten raw, boiled or steamed; sometimes stored in underground pits to keep for the winter	Obtained in the bottoms and foothills in the Late Spring or Summer	Palmer(a) 1975: 222 and (b): 54; Davis 2002: 5; Parish in Davis 2002: 5; Parish

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						1991: 297; Turner 1997: 72
Lily, yellow pond	<i>Nuphar polysepalum</i> Engelm.	Kwunlhp or Txn _x nátkwa 7		Medicine: Applications and washes for sores, cuts and pains (including rheumatism) ; also taken internally for sores		Palmer(a) 1975: 212 and (b): 34, 40, 64
Loesel's tumble-mustard	<i>Sisymbrium loeselii</i>			Introduced species		Davis 2002: 25
Lupine	<i>Lupinus</i> spp	Kwekwikan álhp	A favourite food of marmots; chipmunks eat the seeds when ripe; pika food; elk, moose and mountain goat forage			Mirau 2003: 7; Davis 2002: 26; Parish 1991: 158; Palmer(b)1975: 64, 79; Harcombe Vol 1 1988: 44; USDA moose, mountain goat, elk

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Mallow	<i>Malva neglecta</i>			Introduced species		Davis 2002: 25
Maple, douglas (Mountain maple)	<i>Acer glabrum</i>	Kwekwł7álh p	Mule and whitetail deer, elk and caribou forage; black bear winter den bedding; important beaver food; woodpecker nesting site; possible muskrat food	Native species; Material: wood used to make spoons; snowshoe frames; ground sticks; twine and rope; shafts and frameworks; used for cooking bulbs; Supernatural: Coyote uses the wood to make a spear and buffalo horns in the story of <i>Coyote and Buffalo</i>		Davis 2002: 5, 24; Palmer(b)1975: 35-36, 56; Parish and Thomson 1994: 113; Parish 1991: 73; Dawson 1891: 20; BC Hydro 1982: 21; Cowan 1946: 108-109; BC Hydro 1978: 18-26; Campbell Vol II 1990: 452; Teit 1909: 534; Bouchard 1979: 28; USDA caribou, muskrat, elk
Maple, vine	<i>Acer</i>	Ts'walhtn	Woodpecker	Material: snowshoes		Palmer(b) 1975:

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	<i>circinatum</i> Pursh		nesting site			56; Campbell Vol II 1990: 452
Milkweed	<i>Asclepias speciosa</i> Torr.	Spēp'-sum		Food: latex chewed for pleasure; Material: fibre used for nets, cord, thread		Turner 1997: 165; Dawson 2002: 23
Mint	<i>Mentha arvensis</i> L.	Xwuxw7ú7xw		Food: tea; flavouring; Medicine: tea drunk for colds, coughs, consumption and fever		Palmer(b) 1975: 64; Turner 1997: 167
Mock orange (Syringa; may also be called White maple)	<i>Philadelphus lewisii</i>	Mets'mets'á ytkwlhp or Ts'awsn ("soap tree") or Wa'xaselp	Mule deer forage	Material: shafts, frameworks and digging sticks; imitation breastbone decorations; armour; fish spears; snowshoe frames; combs; leaves used for body and laundry soaps; hunting arrows and spears; combs; soap; Commerce:		Davis 2002: 25; Palmer(a) 1975: 212 and (b): 34-36, 63-64, 79, 80; Parish 1991: 80; Turner 1998: 174; Dawson 1891: 23; Teit 1909: 512; USDA mule deer

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				Trade item		
Moss, common lawn	<i>Brachythecium albicans</i>					Davis 2002: 24
Moss, glow	<i>Aulacomnium palustre</i>					Davis 2002: 25
Moss, juniper haricap	<i>Polytrichum juniperinum</i>					Davis 2002: 25
Moss, rusty steppe	<i>Tortula ruralis</i>					Davis 2002: 26
Moss, silver	<i>Bryum argenteum</i>					Davis 2002: 26
Mullein	<i>Verbascum thapsus</i>	Smenmámene				Davis 2002: 25; Palmer(b) 1975:

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
						69, 79
Mushroom, meadow (Field Mushroom) and Mushroom, shaggy mane	<i>Agaricus campestris</i> (field) and <i>Coprinus comatus</i> (shaggy mane)	Semtl'áka7 (gill mushroom and cone-shaped mushroom in general)	Squirrels eat them when dry	Food: Shaggy mane mushrooms often fried (these mushrooms were not traditionally eaten)		Palmer(a) 1975: 212 and (b): 34, 37, 48; Turner 1997: 40
Mushroom, oyster	<i>Pleurotus ostreatus</i> Fr.			Food: usually boiled then fried; sometimes threaded and dried		Turner 1997: 41
Needle-and-thread grass	<i>Stipa comata</i>					Davis 2002: 25
Needlegrass	<i>Stipa</i> spp					Davis 2002: 26
Nightshade, woody (Bittersweet)	<i>Solanum dulcarna</i>		Preferred habitat area for cardinals	Introduced species		Davis 2002: 26; Meuninck 2008: 102

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
nightshade, Climbing nightshade						
Old man's whiskers	<i>Geum triflorum</i>					Davis 2002: 25
Onion, wild (Nodding onion, Hooker's Onion)	<i>Allium cernuum</i> Roth (Nodding); <i>Allium acuminatum</i> Hook. (Hooker's)	Kweláwa		Food: former root staple of the Komkanetkwa area near Kamloops; roots eaten by Southern Secwepemc; cooked in pits or fire roasted; flavour enhancer; some families camped where it grew to harvest it; roasted, steamed, dried and tied into bundles to preserve for future use	Obtained in the bottoms and foothills in the Spring and up to July in other areas	Peacock 1998: 1; Palmer(a) 1975: 222 and (b): 34, 54, 78; Davis 2002: 5; Turner 1997: 62; Dawson 1891: 20; Teit 1909: 514
Orchardgrass	<i>Dactylis glomerata</i>			Introduced species		Davis 2002: 25

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Oregon-grape (Barberry, Mahonia, Tall oregon grape, Tall Mahonia)	<i>Mahonia aquifolium</i> (Pursh) Nutt. and <i>Mahonia nervosa</i> (Pursh) Nutt.	Sts'Isolhp	Berries eaten by birds; mule and whitetail deer forage; moose forage; beaver food; waxwings feed on the berries	Food: berries eaten and made into a jelly for meats (Teit states was "not much used"); Medicine: leaves and stems boiled for a blood tonic	July or August	Davis 2002: 26; Meuninck 2008: 137; Parish 1991: 72; Palmer(b) 1975: 59, 78; Bouchard 1979: 280; Turner 1997: 98; BC Hydro 1982: 21; BC Hydro 1978: 18-26, 40-43; Handbook No 22: 57; Teit 1909: 515, 618
Paintbrush	<i>Castilleja</i> spp	Sklaltn xkwetkwtút l'stns	Grizzly bear food	Medicine: eye wash	early June	Palmer(b) 1975: 40, 59, 69, 78; USDA grizzly
Peace root	[unidentified]			Food: root eaten	Obtained in the bottoms and foothills in the	Palmer(a) 1975: 222 and (b): 37

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					Spring	
Pearly Everlasting	<i>Anaphalis margaritacea</i>		Beaver food	Other: dried, shredded leaves and flowers used as sanitary napkins		Turner 1998: 208; BC Hydro 1978: 18-26
Pennycress, field	<i>Thlaspi arvense</i>			Introduced species		Davis 2002: 24
Penstemon, shrubby	<i>Penstemon fruticosus</i>	Sagsásagt	Possible elk forage	Medicine: tea used to wash sore or injured eyes; drink tea for a "blocked bladder"		Palmer(a) 1975: 212 and (b): 34, 41, 69; Parish 1991: 69; USDA elk
Pine, lodgepole (Black pine, Scrub pine, Mountain pine; mis-termed	<i>Pinus contorta</i> Dougl. Ex Loud.	Kwekwelí7t	Provides winter habitat for mule deer; Inner bark eaten by many small mammals (e.g. snowshoehare, vole and squirrels);	Food: cambium eaten fresh (when the leaves were still growing on the tree) and dried; Medicine: bark used for coughs and tuberculosis; Material: fire starter; fire fuel (burns even when		Mowat 2000: 7; Parish 1991: 35; Parish and Thomson 1994: 31; Palmer(b) 1975: 37, 41, 51; Turner 1997: 53-54;

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Jackpine)			cambium favoured by bears; red squirrels eat the seeds; goldeneyes and Bufflehead nest in cavities; Sharp-tailed grouse nest under sparse canopies of this pine; woodpeckers use the decaying trees; caribou forage; possible whitetail deer food	green); temporary home covering; bark lodges; bark baskets to "catch fat drippings;" needles from at least one of the pine species is used for making baskets [possibly not this species] and are gathered near the ballpark at IR 2 and southeast of the cemetery at IR 2 for this purpose		Dawson 1891: 22; Harcombe Vol 1 1988: 62; Campbell Vol I 1990: 354, 358 and Vol II: 90; Shuswap b 1986: 1; Teit 1909: 493, 500-501, 515; Keisker 2000: 19; USDA caribou, whitetail deer

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Pine, ponderosa (Yellow pine, Western yellow pine, Bull pine, Rock pine)	<i>Pinus ponderosa</i> Dougl. Ex Laws.	S7atkwlhp	Porcupines eat the cambium layer, usually at the "sugar zone," 90-120 cm below the top of the tree; porcupines eat the buds and twigs in winter; Great Blue Heron, flickers, owls, woodpeckers, hummingbirds, hawks and Bald and Golden eagles and other birds of prey nest in the trees; goldeneyes and Bufflehead nest in cavities; Sharp-tailed grouse nest under sparse	Food: The seeds, or nutlets, and cambium were eaten; Ceremonial: used for celebrations; Material: tanning; fire fuel; Medicine: boughs struck on body during and after sweatbaths		Peacock 1998: 1; Palmer(a) 1975: 221 and (b): 36, 37, 43, 52; Davis 2002: 5, 25; Parish 1991: 34; Turner 1997: 55-56; Dawson 1891: 18, 22; Harcombe Vol 1 1988: 98; Campbell Vol I 1990: 238, 354, 358 and Vol II: 18, 32, 44, 48, 90, 358, 360, 374, 388; Teit 1909: 515; USDA mountain goat, whitetail deer, vole

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/Used	Reference/s
			canopies of this pine; mountain goat food; possible whitetail deer food; vole habitat			
Pine, white (Mountain white pine, Western white pine, Silver pine, Nut pine)	<i>Pinus monticola</i>	Na7á7tkwlh p or Seláwlh	Red squirrels eat the seeds from the cones; Great Blue Heron nest in the trees; possible whitetail deer food	Medicine: pitch used, particularly for cuts; Material: smaller bark canoes and possibly canoe paddles; baskets made of the roots; roots were dyed black with extracts of a fern root and red with alder; Food: cones eaten		Parish 1991: 38; Parish and Thomson 1994: 45; Palmer(b) 1975: 36, 37, 41, 51-52, 79; Turner 1997: 165; Dawson 1891: 14; Cowan 1946: 113; Campbell Vol I 1990: 238; Teit 1909: 515; USDA whitetail; Boas 1891: 636

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
Pine, Whitebark	<i>Pinus albicaulis</i> Engelm.	Is-tshī-'kālp'	Favoured food of the Clark's nutcracker (eats the seeds from the cones); Grizzly and black bears feed on whitebark pine seed caches; pika food; possible whitetail deer food	Food: seeds, or nutlets eaten like peanuts (were often roasted); roasted nuts can be dried, ground and mixed with berries; people often camped near the trees to harvest the seeds; cambium sometimes eaten	Seeds gathered in late August and September in the mountain ridges	Parish and Thomson 1994: 37, 38; Turner 1997: 52; Dawson 1891: 22; Cowan 1946: 119; USDA grizzly, black bear, whitetail deer
Pinedrops	<i>Pterospora andromedea</i>					Davis 2002: 25
Pinegrass	<i>Calamagrostis rubescens</i>			Clothing: socks and insoles for moccasins woven from the grass		Davis 2002: 25; Parish 1991: 321
Plantain	<i>Plantago major</i>	Slhekw'kan áka		Medicine: Applications and washes for sores, cuts and pains; leaves rubbed on the		Davis 2002: 25; Palmer(b) 1975: 40, 43, 6479

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
				body after sweatbaths		
Plantain, Rattlesnake	<i>Goodyera oblongifolia</i>			Medicine: "Indian Doctor Medicine"		Parish 1991: 289
Pohlia, common nodding	<i>Pohlia nutans</i>					Davis 2002: 24
Prairie Pepper-grass	<i>Lepidium densiflorum</i>					Davis 2002: 25
Prince's Pine (Pipsisewa)	<i>Chimaphila umbellata</i>			Identified species but use unknown		Mirau 2003: 7
Puncturevine	<i>Tribulus terrestris</i>			Noxious weed		Davis 2002: 25
Pussytoes	<i>Antennaria</i> spp					Davis 2002: 25, 26; Mirau 2003: 7
Quackgrass	<i>Elymus</i>			Introduced species		Davis 2002: 25

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	<i>repens</i>					
Raspberry, black (Blackcap, Blackberry, Wild Loganberry)	<i>Rubus leucodermis</i> Dougl. Ex T. & G.	Metsúkw		Food: an important berry ; once dried into cakes for winter; frozen, canned or made into jelly today	June and July or Fall	Palmer(a) 1975: 222 and (b): 67, 79; Davis 2002: 24; Turner 1997: 154; Teit 1909: 515
Raspberry, creeping (Nagoonberry)	<i>Rubus acaulis</i> Michx. (also called <i>Rubus articus</i>)	Tektk'a7úl exw (False wild strawberries)		Food: berries likely eaten; Medicine: leaves used for diarrhea		Parish 1991: 60; Palmer(b) 1975: 66, 67, 80; Turner 1997: 152
Raspberry, red (Wild raspberry)	<i>Rubus idaeus</i>	S7aytskw m	This or other raspberry species are food for beaver and whitetail deer; moose forage; this or other raspberry species are eaten by	Food: an important berry for the Southern Secwepemc; combined with strawberries and other juicy berries to made a fruit-leather that was a favoured treat of children; made into	End of June, early July	Palmer(a) 1975: 212, 222 and (b): 34, 67, 80; Davis 2002: 25; Parish 1991: 61; Turner 1997: 153; BC Hydro date u/k: 18-

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			thrushes and waxwings	jams and jellies; Medicine: decoction from roots used as a stomach remedy		24, 40-43; Handbook No 22: 29, 57; USDA whitetail deer
Rice root	<i>Fritillaria lanceolata</i>	Sak'ám̄xwa		Food: roots eaten	Obtained in the bottoms and foothills in the Spring	Palmer(a) 1975: 212, 222 and (b): 34, 54
Rose, nootka (Wild rose); Prickly Rose; Dwarf wild rose	<i>Rosa nutkana</i> Presl (Nootka); <i>Rosa acicularis</i> (Prickly); <i>rosa gymnocarpa</i> (Dwarf wild)	Sk'eplánlhp	Wild ungulates browse on the foliage and young stems; Coyotes, bears, grouse and other wild animals eat rose hips; mule and whitetail deer forage; moose forage; beaver food; waxwings eat the	Food: rose hips eaten casually or when food was scarce, and for Vitamin C; tea made from the leaves and stems (and potentially the hips, though there is some dispute on this use) branches and inner bark; jam and jelly in modern times; Material: shafts and frameworks; arrows and	Late Summer up to mid-Winter when they were gathered frozen from bushes	Davis 2002: 25; Palmer(b) 1975: 35-36, 67,79; Parish 1991: 65; Turner 1997: 150; BC Hydro 1982: 21; BC Hydro 1978: 18-26, 40-43; Teit in Palmer(b) 1975: 67; Handbook No 22: 57; Teit 1909:

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			berries from one or more of the rose plants	spears; cuirasses, rods and shields for warfare; Supernatural: branches broken and left in a house four 4 days (and then burned) after a corpse was removed; Coyote replaces his eyes with rose-berries in the story of the <i>Eye Juggler</i>		515, 519, 538
Rose, prairie (Wood's rose)	<i>Rosa woodsii</i>		Likely mule and whitetail deer forage, moose forage and beaver food	Material: shafts and frameworks: Medicine: tea tonic		Davis 2002: 25; Palmer(b) 1975: 35-36, 40; BC Hydro 1982: 21; BC Hydro 1978: 18-26, 40-43
Rush, scouring	<i>Equisetum hyemale</i>		Waterfowl habitat and forage	Material: possibly floor mats; covering for temporary homes; Medicine: eases labour		Davis 2002: 26; Parish 1991: 372; Bouchard 2000: 281; BC Hydro

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						1976: 6-50; Shuswap b 1986: 1
St. John's-wort	<i>Hypericum perforatum</i>			Introduced species		Davis 2002: 26
Sagebrush, pasture and Sagebrush, big and Northern wormwood	Pasture is <i>Artemisia frigida</i> , Big is <i>Artemisia tridentata</i> and Wormwood is <i>Artemisia campestris</i>	Penp'nánl hp (Pasture); Káwkwu (Big sage); Kewkákwwuk wu or Sxwilmn (Wormwood);	Gray partridge and Ring-necked pheasant nest under clumps of sagebrush and other similar plants; Mourning doves nest in the shrubs; big horn sheep, elk and mule deer forage; vole habitat	Food: tea; Ceremonial; Medicine: sweathouse purification tea; tea and twigs dipped in water and rubbed on the body in the sweathouse; leaves put in the nostrils for colds; tired feet soaked in the tea of Big sagebrush; wormwood and Big sagebrush were drunk or inhaled for respiratory ailments, including TB, coughs and colds; Wormwood extract applied to bruises; hunters mix		Davis 2002: 5; Parish 1991: 67; Palmer(b) 1975: 36, 40, 41, 58, 79; Campbell Vol II 1990: 64, 72, 348; Teit 1909: 501, 516, 618; USDA big horn sheep, mule deer, elk

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				Rocky Mountain juniper and sagebrush together as an eyewash to keep them "clear-sighted"; Big sagebrush is used to repel germs; Material: mosquito repellent; fumigant; tinder; bark woven to make "high shoes," leggings, "kilts," ponchos and caps		
Salsify, yellow (Goat's beard)	<i>Tragopogon dubius</i>			Introduced species		Davis 2002: 26
Sarsaparilla, wild	<i>Aralia nudicaulis</i>		Moose forage	Medicine: tea drunk for colds		Parish 1991: 250; USDA moose

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Saskatoon Berry (Service berry)	<i>Amelanchier alnifolia</i> Nutt. Ex Roemer	Spekpkálh p or Spekpek7ú7 i or Xwuyáyles	Bears feed intensively on this berry; favoured food of grizzly bear; important forage for mule and whitetail deer; provides winter browse for many hoofed mammals; many bird species eat the berries in August; beaver food; moose forage; Mourning doves nest in the bushes	Food: One of the three highest yielding berries; dried into cakes; Material: arrows and spears; digging sticks; fire starter; Ceremonial: functioned as a crest of one of the women's dancing societies; Feast of First Fruits, when the first fresh berries were eaten, was practised at Big Bar and likely other areas in Secwepemc territory; Commerce: dried cakes were a trade item with coastal First Nations; Supernatural: the berries growing around the mouth of Big Bar Creek are mentioned in <i>The Story of the Man who Married the Grixly Bear</i> ; Coyote asks his niece to put a basketful of the berries as a grave	Harvested in June, July or August depending on the variety and elevation; gathered from late July to October	Davis 2002: 25; Palmer(a) 1975: 210, 222, 223 and (b): 34, 36, 38, 56, 78, 65-66, 79, 80; Davis 2002: 4, 12; Parish 1991: 55; Bouchard 2000: 280; Turner 1998: 140-141; Dawson 1891: 17, 21; Teit in Parish(b) 1975: 66; BC Hydro 1982: 21; BC Hydro 1978: 18-26 and 40-43; Harcombe Vol 1 1988: 108, 138; Campbell Vol II 1990: 348; Teit 1909: 514, 519; Bouchard 1979: 66

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
Sedge	<i>Carex</i> spp		Important forage and habitat for waterfowl; elk; moose, mule deer and whitetail deer forage; black bear forage; vole habitat and food; pika, muskrat and beaver food; mink and vole habitat; grebe and Lesser scaup nesting material; Ringnecks, rails, coots and Northern harrier nest in or amongst sedges; Sandhill cranes nest among thick patches			Davis 2002: 26; BC Hydro 1976: 6-50; BC Hydro 1982: 21; Cowan 1946: 108-109, 113, 115, 119; BC Hydro 1978: 18-24; Campbell Vol I 1990: 168-180, 320, 328 and Vol II: 22, 98, 104, 108; USDA moose, muskrat, mink, vole, elk

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Sheperd's purse	<i>Capsella bursa-pastoris</i>			Introduced species		Davis 2002: 26
Silverberry (Silver buffalo berry, Silver willow, Wolfwillow, Pink-barked willow)	<i>Elaeagnus commutata</i> (Teit refers to as <i>Elaeagnus argentea</i>)			Material: thread and twine; woven into bags and wallets; seeds used as beads for necklaces		Teit 1909: 497, 509
Skunk cabbage	<i>Lysichitum americanum</i> ; <i>Lysichitun kamischatcense</i> (Dawson)	Tímat	Beaver food	Food: rhizomes eaten; Medicine: applications and washed for sores, cuts and pains; "hand ache" cure; Material: leaves used to line steaming pits; leaves used as plates for food	Early Spring	Palmer(a) 1975: 210 and (b): 34, 40, 41, 53; Turner 1997: 60; Dawson 1891: 20; BC Hydro 1978: 18-26

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Snowberry (Creeping snowberry, Waxberry, Snowbush)	<i>Symphoricarpos albus</i> ; <i>Symphoricarpos mollis</i>	T'iwacwll (albus); Tl'xwaxwtk wlhp (mollis)	whitetail and mule deer forage; beaver food; grizzly bear food	Food: berries eaten and dried for winter use; Material: used as a broom; hollowed-out twigs used to make pipe-stems; tea used for fragrance; Other: children would step on the berries in the Fall to make a popping sound "like firecrackers"; Medicine: eye wash; pregnant women bathed in the tea	Summer	Davis 2002: 5, 26; Parish 1991: 82; Palmer(b) 1975: 37, 69; Turner 1997: 113; BC Hydro 1982: 21; BC Hydro 1978: 18-26; USDA grizzly
Snowbush and Buckbrush	<i>Ceanothus</i> spp	Tswelstám	Important forage for mule and whitetail deer; moose and elk forage	Medicine: Snowbush used as an eye wash; Buckbrush is boiled and drunk for the flu and burned to fumigate bed bugs; Supernatural: during the Spanish flu epidemic in 1918 an owl told an old lady to drink the		Palmer(b) 1975: 40, 65, 80; Turner 1997: 168; BC Hydro 1982: 21; Harcombe Vol 1 1988: 138; USDA moose, elk

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				plant. Everyone who drank it lived		
Soapberry (Soopalalie, Hooshum berry, Buffalo berry, bearberry)	<i>Shepherdia canadensis</i>	S̄wesma mlhp, S̄wesmálhp, or X̄wesmálhp	Grizzly and black bear food; whitetail deer forage	Food: Teit refers to it as the second most important berry of the Secwepemc; Indian ice cream; canned juice drunk as a beverage; Medicine: tea tonic used for stomach aches; decoction used in childbirth; purgative used by young men in training; Ceremonial: decoction drunk in sweathouses for purification and in death purification rites	Late Fall when the berries are at their sweetest and the leaves have "partly fallen"	Palmer(a) 1975: 210 and (b): 34, 40, 61-62, 66; 80; Davis 2002: 4; Parish 1991: 71; Dawson 1891: 21-22; Harcombe Vol 1 1988: 108; Teit 1909: 514, 515, 618; USDA grizzly, black bear, whitetail deer
Sorrel, sheep	<i>Rumex acetosella</i>		Vole food	Introduced species		Davis 2002: 26; Cowan 1946: 113

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Spirea birch-leaved	<i>Spiraea betulifolia</i>	Petspetsek lhúlhel-exw		Medicine: tea drunk for stomach aches and diarrhea		Davis 2002: 24; Palmer(b) 1975: 41, 67
Spring beauty (Western spring beauty; Indian potato, Mountain potato)	<i>Claytonia lanceolata</i> Pursh	Skwnkwim	Voles, pikas, marmots and other small animals dig the roots up and hide them in caches for winter food; grizzly bear food	Food: an important carbohydrate for the Spallumcheen; boiled like potatoes; stored in deep earthen pits; former root staple of the Komkanetkwa area near Kamloops; taken from small mammal caches	Obtained in the bottoms and foothills in June, soon after flowering, or in the Fall when they are sweeter	Davis 2002: 3, 4; Peacock 1998: 1; Palmer(a) 1975: 210 and (b): 34, 65, 79; Parish 1991: 258; Turner 1997: 135; Dawson 1891: 20; Harcombe Vol 1 1988: 108; Teit 1909: 514
Spruce, engelmann (Columbia spruce, Mountain spruce, Silver	<i>Picea engelmannii</i>	Tl'salhp	Moose and caribou habitat; caribou and whitetail deer forage; red squirrels eat the seeds from the cones and nest	Material: Fishing traps made of the withes; canoes made from bark; possibly canoe paddles; rope; split roots used to sew baskets and bark canoes; roots used		Mirau 2003: 7; Palmer(b) 1975: 36; Parish 1991: 44; Palmer(b) 1975: 36, 51, 80; BC Hydro 1976: 6-

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spruce)			in spruce groves; goldeneyes and Bufflehead nest in cavities; Bald eagles, hummingbirds and several species of hawks nest in the trees; woodpeckers use the decaying trees	for coiled baskets; bark lodges; house frame covers; dishes; Supernatural: widows/widowers would spend the evening in the sweathouse, bathe in a creek and then rub their bodies with spruce branches [could be referring to another spruce variety]		36; Cowan 1946: 113; Campbell Vol I 1990: 354, 358 and Vol II: 18, 28, 32, 358, 360, 374, 388; Teit 1909: 477, 487, 493, 496, 500; Keisker 2000: 19; USDA caribou, whitetail deer; Boas 1891: 644
Spruce, white and hybrid white and Interior (Canadian spruce, Western white spruce, Alberta	<i>Picea glauca and glauca x. engelmannii</i>	Tl'salhp	Red squirrels eat the seeds from the cones and nest in spruce groves; beaver food; goldeneyes and Bufflehead nest in cavities; Bald eagles,	Food: pitch chewed; Material: bark canoes and possibly canoe paddles		Mirau 2003: 7; Parish 1991: 45; Parish and Thomson 1994: 61; Palmer(b) 1975: 36, 51, 80; Cowan 1946: 113; BC Hydro 1978: 18-26; Harcombe Vol 1

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
spruce, Skunk spruce, Cat spruce)			hummingbirds and several species of hawks nest in the trees; woodpeckers use the decaying trees			1988: 62; Campbell Vol I 1990: 354, 358 and Vol II: 18, 26, 32, 358, 360, 374, 388; Keisker 2000: 19
Stinging nettle	<i>Urtica dioica</i> (also known as <i>Urtica lyallii</i>)	Sucwmamp or Suxwmámlhp	Gadwells and Lesser scaups nest amongst nettles	Medicine: arthritis (you hit it on your arthritis); applications and washes for sores, cuts and pains; body struck with the nettles after sweatbaths for rheumatism or other reasons; can also be drunk; Material: fibre likely used for nets, cord and thread		Davis 2002: 5, 26; Palmer(b) 1975: 40, 43, 70, 79; Dawson 1891: 23; Campbell Vol I 1990: 306, 328; Teit 1909: 618
Stoneseed (Lemonweed)	<i>Lithospermum</i> spp.	Tsgwúgwpa		Medicine: good for sores; boiled and applied to body as a germicide; Material:		Davis 2002: 25; Palmer(b) 1975: 60, 80; Turner

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
				poison extracted from stems for arrow tips; red-tipped roots used to make dye, including dye for gambling sticks		1998: 158-159; Turner 1997: 166; Teit 1909: 475
Strawberry blight	<i>Chenopodium capitatum</i>			Material: juice of the "seeding-head" used for red dye		Dawson 1891: 23; Teit 1909: 476
Strawberry, wild	<i>Fragaria virginiana</i>	Tketkít'ka or Tketk'a7áhp	Towhees feed on the berries; grizzly and black bear food	Food: an important berry; eaten fresh or dried	June to Mid-July	Palmer(a) 1975: 222 and (b): 66, 78, 80; Davis 2002: 4, 26; Handbook No 42: 17; USDA grizzly, black bear
Tarragon	<i>Artemisia dracunculus</i>	Skek'elminst		Medicine: mixed with White clematis to heal sprains, fractures and bruises; added to the bath to relieve tiredness; mixed		Parish 1991: 143; Palmer(b) 1975: 58, 79

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
				with Goldenrod for childbirth; repels sickness and germs; Material: mosquito repellent		
Thimbleberry	<i>Rubus parviflorus</i>	Stakw'm	Beaver food	Food: an important berry for the Secwepemc; Material: cover for berry baskets	July	Davis 2002: 4; Parish 1991: 62; Palmer(b) 1975: 36, 37, 67, 78, 79; BC Hydro 1978: 18-26
Thistle, bull	<i>Cirsium vulgare</i>	Kelsp'u7	Potential pika and grizzly bear food (they both eat one or more types of thistle)	Food: roots eaten when young	Obtained in the bottoms and foothills in the Spring	Palmer(a) 1975: 222 and (b): 59; Davis 2002: 24; Harcombe Vol 1 1988: 44; USDA grizzly
Thistle, canada	<i>Cirsium arvense</i>		Potential pika and grizzly bear food	Noxious weed		Davis 2002: 24; Harcome Vol 1

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/Used	Reference/s
			(they both eat one or more types of thistle)			1988: 4; USDA grizzly
Thistle, edible and Thistle, wavy-leaved	<i>Cirsium edule</i> Nutt. (edible) <i>Cirsium undulatum</i> (Nutt.) Spreng.		Potential pika and grizzly bear food (they both eat one or more types of thistle)	Food: roots of first-year non-flowering Edible thistle plants eaten; roots of Wavy-leaved thistle also eaten		Parish 1991: 135; Turner 1997: 95-96; Harcombe Vol 1 1988: 44; USDA grizzly
Timothy	<i>Phleum pratense</i>			Introduced species		Davis 2002: 26
Toadflax, yellow	<i>Linaria vulgaris</i>			Noxious weed		Davis 2002: 26
Tobacco, wild	<i>Nicotiana attenuata</i>	Simin-min-hooh'-a-looh or Smanx		Other: "Native tobacco"		Dawson 1891: 23; Palmer(b) 1975: 69-70

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
Twinberry, black (Twinberry honeysuckle, Twinflower honeysuckle, Bearberry honeysuckle, Fly honeysuckle, Bearberry)	<i>Lonicera involucrata</i> (Rich.)	Skw'lustsítsns or Skweláks skw' lustsítsns ("bear nibbles on it")	Bear and beaver food; moose forage; eaten by thrushes	Berries avoided by people because they attract bears; Medicine: mixed with other plants for arthritis		Parish 1991: 83; Palmer(b) 1975: 61, 79; BC Hydro 1978: 18-24, 40-43; Handbook No 22: 29
Valerian	<i>Valeriana</i> spp.	Kík-wa; Skw'lkw'alt (probably Mountain valerian)	Possible vole forage	Medicine: used for colds; disinfectant;		Parish 1991: 197; Palmer(b) 1975: 70, 79; Cowan 1946: 118
Vetch, woolly	<i>Vicia villosa</i>					Davis 2002: 26
Violet,	<i>Viola</i>					Davis 2002: 24

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
canada	<i>canadensis</i>					
Violet, early blue	<i>Viola adunca</i>					Davis 2002: 24
Watercress	<i>Rorippa nasturtium-aquaticum</i> (L.) Hayek			Food: eaten raw		Turner 1997: 173
Water parsnip (Wild carrot; Wild saccharin)	<i>Sium suave</i> Walt.	Ats'máts; Atsama'ts		Food: one of the most common roots eaten; root eaten raw or steamed; "finger-like" roots are sweet	Roots gathered in the Spring and early Summer	Palmer(a) 1975: 210, 222 and (b): 34, 37, 57; Davis 2002: 4 and Parish in Davis 2002: 4; Turner 1997: 90-91; Teit 1909: 514
Wheatgrass, bluebunch	<i>Elymus spicatus</i> or <i>Agropyron spicatum</i>		Beaver food; likely bighorn sheep, elk and mule deer forage			Davis 2002: 24; Turner 1998: 222; BC Hydro 1978: 18-26; USDA big horn

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
	(Turner)					sheep, mule deer, elk
Wild ginger	<i>Asarum caudatum</i>	Leket [?]		Food: used to flavour food; Medicine		Davis 2002: 4; Parish in Davis 2002: 4
Willow	<i>Salix</i> spp	Kw'elsálhp	Eating the flowers and seeds may help birds reduce cadmium accumulation in the kidney and liver; moose habitat; moose, caribou, big horn sheep, mountain goat, mule and whitetail deer forage; a preferred food of beaver; muskrat	Material: fibre; rope; mats; sweat-lodge framing (and possibly other frames); fire starter and fire drills (glowing willow roots were carried to start fires when travelling); fire hearth; fire torches; burned to smoke salmon; switches used to carry fish; saplings used to smoke, dry, or roast fish and deer meat; saplings used for ribs of cedar bark canoes; saplings used in		Davis 2002: 26; Palmer(b) 1975: 36, 68, 79; Meuninck 2008: 110; Dawson 1891: 9, 14; BC Hydro 1976: 6-36; BC Hydro 1982: 21; Cowan 1946: 120; BC Hydro 1978: 18-26, 40-43; Harcombe Vol 1 1988: 76, 90, 132, 138, 142; Campbell

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
			<p>food; preferred food plant of the woodrat; possible lemming habitat; lynx feed amongst willow thickets; Mute swans, Lesser scaups and teals nest in willows in shallow water; soras nest under clumps of willow; Sandhill cranes nest amongst thick patches; grizzly bear food</p>	<p>baby baskets; fish traps and weirs made of the withes; strips of the bark are poked through lillies and Desert parsley to hang them to dry; split "wands" used to sew bark canoes; headbands made from the inside bark were worn by pubescent girls and young men in "ritual isolation and training;" young girls "plant" painted willow twigs with fabric attached in a hut during puberty rituals; young men ran twigs down their throats to make themselves throw up; Supernatural: kinnikinick leaves and red willow saplings are smoked in the</p>		<p>Vol I 1990: 238, 300, 328 and Vol II: 100, 108; Dawson in Palmer(b) 1975: 68; Teit in Palmer(b) 1975: 68; Boas in Palmer(b) 1975: 68; Shuswap b 1986: 3; Teit 1909: 490; Bouchard 1979: 3, 132, 134-136, 144, 147, 532; USDA grizzly, big horn sheep, mountain goat, muskrat; Boas 1891: 636, 635</p>

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
				story of <i>Thlee-sa Travels the Land</i> ; Coyote and Kingfisher use saplings to fish in the story of <i>Coyote Travels Around</i>		
Woodsia, oregon	<i>Woodsia oregana</i>		Possible mountain goat forage	Material: cover for berry baskets (along with other species of ferns)		Parish 1991: 366; USDA mountain goat
Yarrow	<i>Achillea millefolim</i>	Kets'wi7a7l hp		Material: leaves smoked to repel mosquitoes; Medicine: drank as a blood		Davis 2002: 26; Parish 1991: 116; Palmer(b) 1975:

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/Used	Reference/s
				purifier		40, 58
Yew, western (American yew)	<i>Taxus brevifolia</i>		Birds (such as blackbirds, waxwings and nuthatches) and small animals eat the fruit and disperse the seeds; black-tailed deer and elk browse the foliage in winter; Snags are habitat for cavity-nesting birds; beaver food; one of the most important foods for moose	Material: bows; Commerce: trade item		Palmer(b) 1975: 36; Meuninck 2008: 139; Parish and Thomson 1994: 101-102; Dawson 1891: 17; BC Hydro 1978: 18-26, 40-43; Harcombe Vol 1 1988: 142; Teit 1909: 518-519, 536
Unidentified	<i>Peucedanum</i>			Food: one of the most common roots eaten		Dawson 1891: 20; Teit 1909: 514

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/Used	Reference/s
	<i>eurycarpum</i> [and potentially other species of this genus]					
Unidentified		Kwant		Cosmetic: perfume		Palmer(b) 1975: 36, 70
Unidentified	Possibly <i>Chrysothamus nauseosus</i>	Peḱwp'kwáwt		Material: used after it blossoms to make pillows		Palmer(a) 1975: 212 and (b): 34, 70
Unidentified		Ntekê'llsten		Supernatural: love charm; plant obtained from the Okanagan and Thompson		Teit 1909: 619
Unidentified, but possibly Water	Possibly <i>Polygonum amphibium</i>	Thwekwelóltkwa		Water plant; Medicine: tea tonic; boiled and drunk as a laxative		Palmer(b) 1975: 40, 70

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
knotweed						
Unidentified white fungus				This fungus grows on trunks of large trees; Supernatural: teenage boys rub it on their bodies to give them strength		Teit 1909: 618
Unidentified white and black lichens	Smutlé'lst			these lichens grow on rocks; Medicine: decoction drunk to gain weight		Teit 1909: 618
Unidentified	Possibly <i>Stipa comata</i>	Pátkwatns ge sek'láp ("Coyote's needle and thread")		A grass seed resembling a needle and thread that if you get in your ear "will not come out"		Palmer(b) 1975: 70
Unidentified		Sxala/uxia		Food: One of the most common roots eaten		Teit 1909: 514
Unidentified		Kalspō'		Food: One of the most		Teit 1909: 514

Plant Name/s (English, Common)	Scientific Name	Shuswap Name/s	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/Used	Reference/s
				common roots eaten		
Unidentified		Tsêrà'		Food: One of the most common roots eaten		Teit 1909: 514
Unidentified		Xanexai'n		Food: One of the most common roots eaten		Teit 1909: 514
Unidentified		Ts'alkwam		Supernatural: a weed used to hit dead standing trees to make it rain		Palmer(b) 1975: 70
Unidentified		Yi7út ("snake root")		Found at Baldy (Tod) Mt.; Medicine: chew for a "blocked bladder"; mix with tobacco and chew "as a snoose to make you feel lively or for a good rest at night"		Palmer(b) 1975: 41, 70-71

Appendix 2: SFN TEK - Animals

Animal Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Plant Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
*Spellings and initial list of names via First Voices (www.firstvoices.com/en/Secwepemc)						
Badger	<i>Taxidea taxus</i>	sq̓ítxleqs				
Bald Eagle	<i>Haliaeetus leucocephalus</i>		Habitat: Aspen (trembling), Cottonwood, Hemlock, Pine (Ponderosa), Spruce	Habitat		See references in Plant Index
Bat		st'en̓wéye	Habitat: Birch	Habitat		See references in Plant Index

Animal Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Plant Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
Bear, black	<i>Ursus americanus</i>	kenkéknem	Maple, douglas (Mountain maple) used for bedding, Food: Aspen, Blueberry(dwarf), Cherry(choke), Cottonwood, Black Currant, Douglas Fir (sap), Fir(needles), Hazelnuts, Horsetail, Huckleberry, Pine (lodgepole & whitebark seeds), Rose Hips, Saskatoon Berry, Sedge, Strawberry (wild), Twinberry. Birch used for scratching.	Food; Habitat		Ignace 1998:207; Teit 1909:513; see references in Plant Index

Animal Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Plant Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/Used	Reference/s
			Habitat: Blueberry (oval leaved) bushes, Cedar, Maple (Douglas)			

Animal Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Plant Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/Used	Reference/s
Bear, grizzly	<i>Ursus arctos</i>	skemꞑcís	Food: Lily, yellow avalanche, Blueberry(dwarf & oval leaved), Cinquefoil, Clover, Cow Parsnip, Black Current, Wild Currant, Desert Parsley, Devil's Club, Dogwood, Douglas Fir (sap), Elderberry, Fairy Bells, Hawthorn, Hazelnuts, Honeysuckle, Horsetail, Huckleberry, Kinnikinnick, Lily (yellow), Paintbrush, Pine (lodgepole &	Food; Habitat		See references in Plant Index

Animal Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Plant Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/Used	Reference/s
			whitebark seeds), Rose Hips, Saskatoon Berry, Snowberry, Soapberry, Spring Berry, Strawberry (wild), Thistle, Twinberry, Willow. Habitat: Blueberry (oval leaved) bushes			

Animal Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Plant Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/Used	Reference/s
Beaver	<i>Castor canadensis</i>	sqlu7úwᑲi	Food: Maple, douglas (Mountain maple), Alder (Mountain Alder), Aspen, Birch, Blueberry (oval leaved), Cattail, Cherry(pin & choke), Cedar, Cottontail, Devil's Club, Dogwood, Elderberry, False Solomon's Seal, Fern(lady), Fireweed, Gooseberry, Hawthorn, Hazelnuts, Hemlock(western), Oregon-grape, Pearly Everlasting,	Food; Habitat		Teit 1909:513; see references in Plant Index

Animal Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Plant Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/Used	Reference/s
			Raspberry, Rose (nootka & prairie), Saskatoon Berry, Sedge, Skunk Cabbage, Snowberry, Soapberry, Spruce (white), Thimbleberry, Twinberry, Wheatgrass, Willow, Yew. Habitat: Cattail, Trembling Aspen used for dams and lodges.			
Bighorn Sheep	<i>Ovis canadensis</i>		Food: Balsamroot, Brome, Bluegrass, Cinquefoil, Clover, Fescue, Sagebrush,	Food		See references in Plant Index

Animal Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Plant Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
			Wheatgrass, Willow			
Blackbird	<i>Turdus merula</i>		Habitat: Cattail	Habitat		See references in Plant Index
Bobcat		styxyéyx				
Bonaparte's Gulls			Habitat: Hemlock	Habitat		see references in Plant Index
Bufflehead	<i>Bucephala albeola</i>		Habitat: Aspen (trembling), Cottonwood, Douglas Fir, Pine (Lodgepole & Ponderosa), Spruce	Habitat		see references in Plant Index
Bush rat	<i>Rattus fuscipes</i>	scencéllcw				
Cardinal			Habitat: Nightshade	Habitat		See references in Plant Index

Animal Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Plant Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
Caribou	<i>Rangifer tarandus</i>	selcwéycen	Food: Maple, douglas (Mountain maple), Bilberry, Birch, Blueberry (dwarf & oval leaved), Cladonia, Dogwood, Fir, Hemlock (western), Lichen (black tree, dog pelt & pixie-cup), Pine (lodgepole), Spruce (mountain), Willow. Habitat: Fir	Food, root digger (from antler); Habitat	Winter (lichen)	Ignace 1998:207; Teit 1909:513; see references in Plant Index
Canada Goose	<i>Branta canadensis</i>		Habitat: cattail	Habitat		See references in Plant Index
Canvasbacks			Habitat: cattail	Habitat		See references in Plant Index

Animal Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Plant Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
Chickadee	<i>Parus atricapillus</i>		Food: Birch, Knapweed. Habitat: Aspen (trembling), Birch	Food; Habitat		See references in Plant Index
Chipmunk		qets'wéwꞑye	Food: Lupine (seeds), Douglas Fir (seeds)			See references in Plant Index
Coots			Habitat: Sedge	Habitat		See references in Plant Index
Cougar	<i>Puma concolor</i>	smúwe7				
Coyote	<i>Canis latrans</i>	skꞑelép	Food: Huckleberry, Rose Hips			see references in Plant Index
Crossbills			Food: Douglas Fir (seeds). Habitat: Birch	Habitat		See references in Plant Index
Deer, blacktail		stqwéqꞑwi7		Food	Fall	Ignace 1998:207;

Animal Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Plant Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/Used	Reference/s
(doe)		pe				Teit 1909:513
Deer, mule	<i>Odocoileus hemionus</i>		Food: Aspen, Balsamroot, Bilberry, Birch, Blueberry(dwarf & oval leaved), Brome, Bluegrass, Cattail, Cherry(pin & choke), Clover, Cottonwood, Dandelion, Dogwood, Douglas Fir, Fireweed, Grouseberry, Hazelnuts, Hemlock (western), Huckleberry, Juniper, Lichen (black tree), Lily (mariposa), Maple	Food; Habitat	Winter (lichen)	See references in Plant Index

Animal Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Plant Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/Used	Reference/s
			(douglas), Mock Orange, Oregon-grape, Raspberry, Rose (nootka & prairie), Sagebrush, Saskatoon Berry, Sedge, Snowberry, Snowbush & Buckbrush, Wheatgrass, Willow. Habitat: Douglas Fir, Hemlock, Pine (Lodgepole)			

Animal Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Plant Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/Used	Reference/s
Deer, whitetail	<i>Odocoileus virginianus</i>		Food: Aspen, Maple, douglas (Mountain maple) Alder (Mountain Alder), Aspen, Bilberry, Birch Blueberry(dwarf & oval leaved), Cattail, Cherry(pin & choke), Black Currant, Wild Currant, Cottontail, Dogwood, Douglas Fir, Elderberry, Grouseberry, Hawthorn, Hazelnuts, Hemlock (western), Honeysuckle, Huckleberry, Juniper,	Food; Habitat	Fall, Winter (lichen)	Ignace 1998:207; Teit 1909:513; see references in Plant Index

Animal Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Plant Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/Used	Reference/s
			Kinnikinnick, Lichen (black tree), Oregon-grape, Pine (lodgepole, white & whitebark), Raspberry, Rose (nootka & prairie), Saskatoon Berry, Sedge, Snowberry, Snowbush & Buckbrush, Soapberry, Spruce (mountain), Willow. Habitat: Birch			
Dove (Mourning)	<i>Zenaida macroura</i>		Habitat: Birch, Cottonwood, Dogwood, Elderberry, Hawthorn,	Habitat		See references in Plant Index

Animal Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Plant Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
			Sagebrush, Saskatoon Berry			
Elk	<i>Cervus elaphus</i>	tcets'	Food: Lupine, Aspen, Balsamroot, Bilberry, Blueberry(dwarf & oval leaved), Buckwheat, Brome, Bluegrass, Clover, Cow Parsnip, Black Currant, Wild Currant, Grouseberry, Hemlock (western), Lupine, Maple (douglas), Pensteman, Sagebrush, Sedge, Snowbush & Buckbrush,Wheatg	Food		Ignace 1998:207; Teit 1909:513; see references in Plant Index

Animal Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Plant Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/Used	Reference/s
			rass			
Finch			Habitat: Birch	Habitat		See references in Plant Index
Fisher	<i>Martes pennanti</i>	stwelelé'q w				
Flickers			Habitat: Aspen (trembling), Cottonwood, Pine (Ponderosa)	Habitat		See references in Plant Index
Fox		xwélemc				

Animal Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Plant Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/Used	Reference/s
Gadwells			Habitat: Stinging Nettles	Habitat		see references in Plant Index
Gopher		sisk'				
Goldeneye			Habitat: Cottonwood, Douglas Fir, Pine (Lodgepole & Ponderosa), Spruce	Habitat		see references in Plant Index
Great Blue Heron	<i>Ardea herodias</i>		Habitat: Cottonwood, Pine (Ponderosa & White)	Habitat		see references in Plant Index
Grebe			Habitat: Horsetail, Sedge	Habitat		see references in Plant Index
Groundhog	<i>Marmota monax</i>					

Animal Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Plant Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
Grouse		swéwelqw	Food: Grouseberry, Rose Hips. Habitat: Aspen (trembling), Cattail, Douglas Fir, Pine (Lodgepole & Ponderosa)	Food; Habitat		Ignace 1998:207; see references in Plant Index
Hawk	<i>Diurnus Accipitridae</i>		Habitat: Alfalfa meadows, Birch, Cottonwood, Pine (Ponderosa), Spruce	Habitat		see references in Plant Index
Horse			Food: Alfalfa	Food		see references in Plant Index
Humming bird	<i>Triochilidae Apodiformes</i>		Food: Birch (sap). Habitat: Aspen (trembling), Cedar, Cottonwood, Fir, Hemlock, Pine (Ponderosa),	Food; Habitat		see references in Plant Index

Animal Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Plant Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
			Spruce			
Kinglets			Food: Birch			see references in Plant Index
Lemming			Habitat: Willow			
Lesser Scaup			Habitat: Alfalfa meadows, Cattail, Labrador Tea, Sedge, Stinging Nettle, Willow	Habitat		see references in Plant Index
Lynx	<i>Felis lynx</i>		Food:	Food		
Mallards	<i>Anas platyrhynchos</i>		Habitat: Cattail	Habitat		see references in Plant Index
Marmot		semréw ²	Food: Clover, Dandelion, Lupine, Spring Beauty			see references in Plant Index

Animal Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Plant Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
Marten						
Mergansers			Habitat: Cedar, Cottonwood, Douglas Fir	Habitat		see references in Plant Index
Mink	<i>Mustela vison</i>		Food: Cattail; Habitat: Cattail, Sedge	Habitat		see references in Plant Index
Moose	<i>Alces alces</i>	teníye	Food: Lupine; Maple, douglas (Mountain maple) Alder (Mountain Alder), Aspen, Birch, Brome, Bluegrass, Blueberry (oval leaved), Cherry(pin &choke), Cottonwood, Wild Currant, Douglas	Food; Habitat	Fall	Ignace 1998:207; Teit 1909:513; see references in Plant Index

Animal Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Plant Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/Used	Reference/s
			Fir, Elderberry, Fir, Fireweed, Hawthorn, Hazelnuts, Hemlock (western), Huckleberry, Lichen (dog pelt), Lupine, Oregon-grape, Raspberry, Rose (nootka & Prairie), Sagebrush, Saskatoon Berry, Sedge, Snowbush & Buckbrush, Twinberry, Willow, Yew. Habitat: Aspen (trembling), Fir, Willow			
Mountiain	Oreamnos		Food: Lupine, Pine (ponderosa),			see references in

Animal Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Plant Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
Goat	americanus		Woodsia, Willow			Plant Index
Mountain sheep		sxwetᑕéy	Food: Lupine, Bluegrass, Cherry(choke), Fescue, Goosesberry, Huckleberry, Kinnikinnick, Lupine	Food		Ignace 1998:207; Teit 1909:513; see references in Plant Index
Mouse		sweláps	Food: Douglas Fir (seeds)	Food		Ignace 1998:207; Teit 1909:513; see references in Plant Index
Muskrat	<i>Ondatra zibethicus</i>	kwékᑕwtne	Food: Maple, douglas (Mountain maple), Cattail, Clover, Sedge, Willow. Habitat:	Habitat		see references in Plant Index

Animal Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Plant Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
			Cattail			
Mute Swan	<i>Cygnus olor</i>		Habitat: Cattail, Willow	Habitat		see references in Plant Index
Northern Harrier			Habitat: Sedge	Habitat		see references in Plant Index
Northern Shovelers			Habitat: Fern	Habitat		see references in Plant Index
Nuthatches	<i>Sitta europaea</i>		Food: Birch. Habitat: Aspen (trembling), Birch	Habitat		see references in Plant Index
Osprey	<i>Pandion haliaetus</i>		Habitat: Cottonwood	Habitat		see references in Plant Index
Otter		sklécwe7				
Owl	<i>Nocturnalis Strigiformes</i>		Habitat: Aspen (trembling), Birch, Cedar,	Habitat		see references in Plant Index

Animal Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Plant Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
			Cottonwood, Hemlock, Pine (Ponderosa)			
Partridge			Habitat: Sagebrush	Habitat		see references in Plant Index
Pika	<i>Ochotona princeps</i>	lehéts'	Food: Pine (whitebark), Sedge, Spring Beauty, Thistle			see references in Plant Index
Porcupine	<i>Erethizon dorsatum</i>		Food: Lupine, Birch, Cattail, Cedar			see references in Plant Index
Rabbit		skú7pecen	Food: Cherry(choke), Pine (ponderosa), Birch	Food		Ignace 1998:207; Teit 1909:513; see references in Plant Index
Racoon	<i>Procyon lotor</i>	sqwyits	Alder (Mountain	Food; habitat		Ignace 1998:207;

Animal Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Plant Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
			Alder), Clover, Blueberry (oval leaved) bush			Teit 1909:513; see references in Plant Index
Rails			Habitat: Sedge	Habitat		see references in Plant Index
Ringneck Ducks	<i>Aythya Collaris</i>		Habitat: Cattail, Sedge	Habitat		see references in Plant Index
Ringneck Pheasants			Habitat: Cattail, Sagebrush	Habitat		see references in Plant Index
Sandhill Cranes	<i>Grus canadensis</i>		Habitat: Labrador Tea, Sedge, Willow	Habitat		see references in Plant Index
Sapsuckers			Food: Birch. Habitat: Aspen (trembling), Birch, Cottonwood	Habitat		see references in Plant Index
Shrew,			Food: Douglas Fir	Food		see references in

Animal Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Plant Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
common			(seeds)			Plant Index
Skunk			Food: Cherry(choke)	Food		see references in Plant Index
Songbird			habitat: Blueberry (oval leaved) bush	Habitat		see references in Plant Index
Squirrel (Red)	<i>Tamiasciurus hudsonicus</i>	sts'ípeq	Food: Cherry(choke), Cedar, Pine (ponderosa & white), Spruce (mountain & White), Douglas Fir (seeds). Habitat: Birch also used as a cache, Cedar, Spruce	Food; habitat		Teit 1909:513; see references in Plant Index
Tern (teal & black)			Habitat: Horsetail	Habitat		see references in Plant Index

Animal Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Plant Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/Used	Reference/s
Thrush			Food: Honeysuckle (seeds), Raspberry			see references in Plant Index
Towhees			Food: Strawberry (wild), Blueberry (oval leaved)			see references in Plant Index
Vole		estsék	Food: balsamroot, Fir(seeds & cones), Cattail, Hawthorn, Hazelnuts, Mushroom (meadow), Pine (lodgepole), Sedge, Sorrel, Spring Beauty, Valerian. Habitat: Cattail, Fireweed, Pine (Ponderosa), Sagebrush, Sedge	Food; Habitat		see references in Plant Index

Animal Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Plant Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
Waxwings	<i>Bombycilla garrulus</i>		Food: Aster, Black Currant, Blueberry (oval leaved), Wild Currant, Kinnikinnick, Lily (yellow), Pine (lodgepole), Raspberry, Rose (nootka), Yew	Food		see references in Plant Index
Waterfowl			Food: Rush, Sedge. Habitat: Cattail, Duckweed, Horsetail, Rush, Sedge	Food; Habitat		see references in Plant Index
Weasel		spépqlts'e	Food: Oregon-grape (berries)	Food		see references in Plant Index
Western Tanager	<i>Piranga ludoviciana</i>		Food: Birch (sap)			see references in Plant Index

Animal Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Plant Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
Whistler (marmot)		sqwí7qwe	Food: Lupine	Food		Ignace 1998:207; Teit 1909:513; see references in Plant Index
Wolf		mélemst ² y e				
Wolverine	<i>Gulo gulo</i>	qwílqen				
Wood Ducks			Habitat: Aspen (trembling), Cottonwood	Habitat		see references in Plant Index
Woodpecker			Food: Birch. Habitat: Aspen (trembling), Birch, Cottonwood, Maple (Douglas & Vine)	Food; Habitat		see references in Plant Index
Woodrat			Food: Willow	Food		see references in

Animal Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Plant Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/Used	Reference/s
						Plant Index
Wren			Food: Douglas Fir (seeds). Habitat: Cattail	Food; Habitat		see references in Plant Index

Appendix 3: SFN TEK - Fish

Fish Name/s (English, Common)	Scientific Name	Secwepemc tsín Names*	Fish and Animal Correspondences (What Species Require This Species for Survival)	Purpose of Use (Ceremonial, Food, Material, etc)	Time of Year Harvested/ Used	Reference/s
*Spellings and initial list of names via First Voices (www.firstvoices.com/en/Secwepemc)						
Dolly Varden		sem7ésell		Food		
Ling cod		ck̓múl'ecw		Food		Ignace 1998:207
Salmon, coho		sxeyqs		Food		Ignace 1998:206; Teit 1909:513
Salmon, humpback				Food		Teit 1909:513
Salmon, kokanee		kekncw		Food		Ignace 1998:207; Teit 1909:513
Salmon, pink				Food		Ignace 1998:206; Teit 1909:513

Salmon, sockeye				Food		Ignace 1998:206; Teit 1909:513
Salmon, spring				Food		Ignace 1998:206; Teit 1909:513
Salmon, steelhead		sgwígwe		Food		
Sculpin (bullhead)		sts'néyǰe		Food		
Sturgeon				Food		Ignace 1998:207; Teit 1909:513
Sucker, red-mouth				Food		Ignace 1998:207
Trout, bull				Food		
Trout, cutthroat		písell		Food		Ignace 1998:206; Teit 1909:513
Trout, rainbow				Food		Ignace 1998:207; Teit 1909:513
Whitefish		llqéq'ne7k		Food		Teit 1909:513

Notes: